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The rate of change in alcohol misuse across adolescence is heritable

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Abstract

Background: Alcohol use typically begins during adolescence and escalates into young adulthood. This represents an important period for the establishment of alcohol use and misuse patterns, which can have psychosocial and medical consequences. Although changes in alcohol use during this time have been phenotypically characterized, their genetic nature is poorly understood.

Methods: Participants of the Avon Longitudinal Study of Parents and Children (ALSPAC) completed the Alcohol Use Disorders Identification Test (AUDIT) four times from age 16-20. We used Mplus to construct a growth model characterizing changes in AUDIT scores across time (N=4545, where data were available for at least two time points). The slope of the model was used as the phenotype in a genome-wide association study (GWAS; N=3380), followed by secondary genetic analyses.

Results: No individual marker met genome-wide significance criteria. Top markers mapped to biologically plausible candidate genes. The slope term was moderately heritable (h^2_{SNP}=0.26, p=0.009), and replication attempts using a meta-analysis of independent samples provided support for implicated variants at the aggregate level. Nominally significant (p<0.00001) markers mapped to putatively active genomic regions in brain tissue more frequently than expected by chance.

Conclusions: These results build on prior studies by demonstrating that common genetic variation impacts alcohol misuse trajectories. Influential loci map to genes that merit additional research, as well as to intergenic regions with regulatory functions in the central nervous system. These findings underscore the complex biological nature of alcohol misuse across development.

Key words: ALSPAC, alcohol problems, genetic influences, heritability, longitudinal model

Introduction

Alcohol use frequently begins in adolescence, with upwards of 50% of US 10th graders (Johnston et al., 2013) and over 40% of UK eleven to fifteen-year-olds (Lifestyle Statistics, 2014) reporting initiation of alcohol use. Consumption typically increases into young adulthood before stabilizing or tapering off (Johnston et al., 2013). The pattern of use established during adolescence into young adulthood can be predictive of later alcohol use problems (Blozis et al., 2007; Duncan et al., 1997; Nixon and McClain, 2010), which are associated with a host of social, economic, and medical costs (McCambridge et al., 2011; Sacks et al., 2015; Secretary of State for the Home Department, 2012a; Secretary of State for the Home Department, 2012b). Thus, clarifying the etiology of alcohol misuse has significant implications for public health.

Genetic factors are known to substantially impact alcohol use phenotypes. A recent meta-analysis of twin and adoption studies reported a heritability estimate of .49 for alcohol use disorders (Verhulst et al., 2015). Other studies have reported heritabilities of .21-.55 for associated phenotypes such as frequency of use, intoxication frequency, and problem drinking (Derks et al., 2014; Edwards et al., 2011a; Edwards et al., 2011b; Geels et al., 2012; Sartor et al., 2013; Wu et al., 2014). Furthermore, evidence suggests that the heritability of alcohol use phenotypes increases from early adolescence into young adulthood (Bergen et al., 2007).

Most prior studies investigating the genetic etiology of alcohol outcomes have focused on either cross-sectional data or lifetime measures. However, abundant evidence suggests that alcohol-related behaviors develop over time and vary across individuals (Casswell et al., 2002; Duncan et al., 1997; Tucker et al., 2003; Wiesner et al., 2007; Windle et al., 2005). Cross-sectional or collapsed (i.e., lifetime) measures fail to capture the dynamic nature of change in alcohol use across time; consequently, genetic studies employing these measures are limited in the extent to which they identify

variants or genes that impact the course of alcohol use. Given the complex nature of alcohol use phenotypes, complementary genetic analyses will likely be needed to comprehensively dissect their etiology: Distinct or only partially overlapping genetic factors might impact different aspects such as alcohol use initiation, acceleration of use, alcohol use disorder, recovery, persistence, etc.

While phenotypic analyses of alcohol use/misuse trajectories are common, corresponding genetic analyses are not. To our knowledge, only one prior study has examined genetic influences underlying changes in alcohol outcomes over time. In a study involving three US cohorts longitudinally assessed from childhood into young adulthood, Adkins and colleagues (2015) modeled developmental trajectories of alcohol consumption, followed by genome-wide association analysis of the resulting slope parameter. Results were meta-analyzed across cohorts, and while no marker met genome-wide significance criteria for association with the slope, biologically plausible suggestive markers were identified, and secondary analyses implicated genes involved in axon guidance and development. Parallel to the analysis of the slope, Adkins et al. conducted association tests for mean alcohol consumption across time. Importantly, distinct genetic loci and pathways were implicated across phenotypes, indicating that the genetic factors impacting *changes* in alcohol consumption differ from those impacting a measure that is effectively cross-sectional.

The current study aims to address the deficit in our understanding of genetic influences on the course of alcohol misuse. We employ data from the Avon Longitudinal Study of Parents and Children (ALSPAC), a prospectively assessed cohort study in the southwest UK, to quantify growth in alcohol misuse from adolescence to emerging adulthood. As only one prior study has subjected a comparable outcome to genetic analysis (Adkins et al., 2015), the current study represents a relatively novel approach to conceptualizing the genetic risk of alcohol use problems.

Materials and Methods

Sample

The Avon Longitudinal Study of Parents and Children (ALSPAC) is a cohort-based sample recruited in southwest England. ALSPAC recruited 14,541 pregnant women resident in Avon, UK with expected dates of delivery 1st April 1991 to 31st December 1992. 14,541 is the initial number of pregnancies for which the mothers enrolled in the ALSPAC study and had either returned at least one questionnaire or attended a "Children in Focus" clinic by 19 July 1999. Of these initial pregnancies, there was a total of 14,676 fetuses, resulting in 14,062 live births and 13,988 children who were alive at 1 year of age. Subsequent phases of enrolment increased the sample size over time. The phases of enrolment are described in more detail elsewhere (Boyd et al., 2013; Fraser et al., 2013). For the current analyses, full or partial phenotypic data were available for 4545 participants (see below). The study website contains details of all the data that is available through a fully searchable data dictionary (http://www.bris.ac.uk/alspac/researchers/data-access/data-dictionary/). Ethical approval for the study was obtained from the ALSPAC Ethics and Law Committee and the Local Research Ethics Committees.

Measures

Participants completed the 10 items of the Alcohol Use Disorders Identification Test (AUDIT; (Babor and Grant, 1989)) at approximately ages 16.5, 17.5, 18.75, and 20.75. At age 17.5, data was collected at a clinic, at which participants completed the AUDIT on a computer. Otherwise, data was collected via postal or online questionnaire. Scores for each AUDIT item range from 0-4 as a function of how frequently (e.g., "Never" to "Daily or almost daily") the respondent has experienced that item. Total scores could range from 0-40.

Genotyping

Samples were genotyped on the Illumina HumanHap550 quad SNP genotyping platform by the Wellcome Trust Sanger Institute (Cambridge, UK) and Laboratory Corporation of America (Burlington, NC, US). Individuals were excluded on the basis of gender mismatch; minimal or excessive heterozygosity; individual missingness >3%; and insufficient sample replication (IBD<0.8). Population stratification was assessed using multidimensional scaling analysis and compared to Hapmap II populations; individuals not of European ancestry were excluded. Markers with MAF<1%, call rate <95%, and violations of Hardy-Weinberg equilibrium (p<5e-7) were removed. Individuals with evidence of cryptic relatedness were removed (IBD>0.1). After quality control filters were applied, data were available for 9,048 subjects and 526,688 SNPs. Haplotypes were estimated using ShapeIT (v2.r644), and imputation was conducted using a phased version of the 1000 Genomes reference panel (Phase 1, Version 3), using Impute V2.2.2 and all reference haplotypes to maximize imputation quality.

Statistical Analyses

Growth model. In Mplus version 7.11, we fit a latent growth model (Muthén and Muthén, 2012) for the four waves of AUDIT scores. We estimated an intercept (I), slope (S), quadratic (Q), and cubic (C) term, and conducted a series of tests to identify the most parsimonious model that provided a good fit to the data, using Root Mean Square Error of Approximation (RMSEA), the Tucker-Lewis Index (TFI), and Comparative Fit Index (CFI) to interpret fit.

Genetic analyses. We conducted GWAS on the imputed (dosage) genetic data using Plink v1.07 (Purcell et al., 2007). Only autosomal markers were analyzed. We included sex and 10 ancestry-informative principal components as covariates. Slope was the focal phenotype; other relevant growth factors (I and Q, see Results) as covariates.

We used VEGAS2 (Mishra and Macgregor, 2015) to perform gene-based analyses. Such tests represent a biology-based approach to interpreting marker-level results, as they consider aggregate effects across a functionally meaningful genomic region. VEGAS2 mapped markers falling within 50kb to known genes; this flanking region was selected in order to capture potentially influential regulatory regions. VEGAS2 accounts for linkage disequilibrium among markers mapping to a given gene based on the selected 1000 Genomes (The 1000 Genomes Project Consortium et al., 2012) reference population (in this case, the European subset). We considered both VEGAS2's gene-based *p*-values and Benjamini-Hochberg false discovery rates (FDR); the latter were derived using *p.adjust* in R version 3.2.3.

We used Genome-wide Complex Trait Analysis (GCTA; (Yang et al., 2011)) to calculate the proportion of phenotypic variance attributable to genetic variation (h^2_{SNP}), using only observed variants. The genetic relationship matrix was constructed using a relatedness cut-off of 0.025. We included sex, non-focal growth parameters, and 10 ancestry-informative principal components as covariates.

Replication. We selected promising ($p<0.0001$) markers for individual SNP-based replication attempts using the only available published study of a similar phenotype (Adkins et al., 2015). P-values were combined across the current study and the meta-analytic results from Adkins et al., using Fisher's method. In addition, we conducted sign tests, using a subset of markers: markers were first selected for their availability in the replication sample; redundant markers were removed, and reference alleles were aligned across the current results and the replication sample. Because the replication sample was a meta-analysis, combined t-statistics were used rather than betas. Markers were next selected for independence using Plink's --clump option in two stages: first, we applied a LD threshold of $r^2=0.5$ within a 250kb window; we then applied a

threshold of r^2=0.2 within a 5mb window. Selected markers were binned by p-value for sign tests.

Epigenomic annotations. SNPs were annotated for various epigenetic and functional features using data obtained from HaploReg (v4.1) (Ward and Kellis, 2016). These data included DNaseI hypersensitive sites (DHS), histone modification sites and chromatin state segmentations (15-state) produced by the RoadMap Epigenomics Project for various cell types and biological samples (Roadmap Epigenomics et al., 2015). For each of these cell type-specific features we calculated the frequencies with which they overlapped any of the assayed SNPs. We then compared the overlap among SNPs nominally associated with growth in alcohol misuse to the background frequencies in order to calculate a cell type-specific fold enrichment score. The background for this analysis comprised a set of 8,887,107 markers, which represents the overlap of markers assayed in this study and included in dbSNP release b137. Enrichment relative to this background was calculated using a binomial statistic. Within each class, we limited our assessment to feature-threshold combinations to which at least 3 markers mapped.

Results

Descriptive statistics

Individuals who did not endorse alcohol use initiation are coded as missing as they did not satisfy the screening condition for administration of the AUDIT items. A total of 1332 individuals participated in all 4 waves; N=1681 participated in 3 waves; N=1532 participated in 2 waves; and N=2026 participated in only 1 wave. AUDIT scores at each wave of data collection are provided in **Table 1**; scores increased gradually across time.

Growth model fitting

We fit a model based on the AUDIT scores across 4 waves, specifying within Mplus the average temporal lag between waves of data collection. We began with a

multi-group model where males were group 1 and females were group 2; we estimated an intercept (I), slope (S), quadratic (Q), and cubic (C) term. The variance of C was constrained to 0 to facilitate model convergence; in addition, within sex, the residual variances of the AUDIT scores were constrained to be equal across waves (Grimm and Widaman, 2010). The model provided an excellent fit to the data (CFI=1.000, TLI=0.999, RMSEA=0.012). We next assessed sex differences by testing whether the means of I, S, Q, and C differed across sexes, and found that they did not ($p>0.1$); this model also provided an excellent fit (CFI=0.998, TLI=0.998, RMSEA=0.017). Therefore, subsequent models combined the sexes. We next restricted the model to individuals for whom at least 2 AUDIT scores were available (N=4545) (CFI=0.995, TFI=0.991, RMSEA=0.029). Within this sample, we tested models that dropped the C and/or Q growth parameters or restricted Q variance to 0, all of which resulted in a decrement in fit (e.g., RMSEA>0.05, CFI/TLI<0.99). Therefore, we selected the model with all four growth parameters, with C variance constrained to 0, as our final model. Individual scores on each parameter were exported for use in the subsequent GWAS.

Genomewide association analysis

We used the slope term (Grimm et al., 2013) from the growth model as the focal phenotype in a GWAS. Of the 4545 individuals with phenotypic data, genotypic data were available for N=3380 individuals. After restricting to markers with INFO≥0.50 and minor allele frequency (MAF) ≥0.01, results were available for 8,972,921 markers. There was no evidence of inflation (λ=1.01, SE=1.11e-6). No marker met genome-wide significance criteria (p<5e-8). The top marker, rs143795029, is located on chromosome 2p12 in an intronic region of *LRRTM4* (*leucine rich repeat transmembrane neuronal 4*). However, low MAF (0.01) and local linkage disequilibrium suggest that this association is potentially artifactual. The next marker, rs6506977 (p=7.88e-7), along with 9 neighboring markers with p<1e-7, maps to the region 45kb 3' of *KLHL14* (*kelch-like*

family member 14) on chromosome 18q12.1 (**Figure 1**). The next most strongly implicated region, with top marker rs17397108, maps to 66kb 3' of *LMX1A* (*LIM homeobox transcription factor 1, alpha*) on chromosome 1q24.1.

Gene-based analysis

Markers with MAF≥0.01 and INFO≥0.50 were submitted to VEGAS2 for gene-based analysis. These markers mapped to 24,233 defined genes. No gene survived corrected significance criteria (q<0.05). The top gene was *NSMCE3* (*NSE3 homolog, SMC5-SMC6 complex component*; alias NDNL2; p=0.000037; q=0.51), on chromosome 15, which plays a role in chromatin remodeling. The 2nd ranking gene, *DHX34* (*DEAH box polypeptide 34*; p=0.000105; q=0.51), maps to chromosome 19 and is involved in RNA regulation (Longman et al., 2013).

Genomewide Complex Trait Analysis

We used GCTA to investigate whether, in aggregate, common genetic variants account for a significant proportion of the phenotypic variance of the slope term. The h^2_{SNP} estimate was 0.26 (SE=0.11, p=0.009), indicating moderate heritability that differed significantly from 0. Although slope was the primary phenotype of interest, we also computed the heritability of the intercept and quadratic terms, which were h^2_{SNP}=0.11 (SE=0.11, p=0.1) and h^2_{SNP}=0 (SE=0.11, p=0.5), respectively. We further tested the genetic correlation between I and S (Q was excluded due to its 0 estimate), and obtained an estimate of 0.05 (SE=0.60, ns).

Replication

We selected markers with p<0.0001 (a threshold chosen to balance statistical support and sample size) for comparison to results reported by Adkins and colleagues (Adkins et al., 2015). Of 9397 markers selected, target sample results were available for 1141 due to the use of different imputation reference panels across studies. The Fisher's combined p-values were <0.05 for 1115 of these markers; however, we

observed little support for specific variants across the current study and the 3 component studies of the Adkins et al. meta-analysis (**Supplementary Table 1**).

We conducted sign tests using independent markers selected for their availability in both the current study and the replication study (N=465,265). We then binned according to discovery sample *p*-value and determined the number of markers within each bin with the same direction of effect across studies. Results are provided in **Table 2**. At stringent significance thresholds ($p \leq 0.0001$) we observed modest evidence of agreement across studies, though these results are based on small numbers of markers. At more inclusive thresholds ($p \leq 0.10$ to $p \leq 0.50$), results indicated more consistently significant overlap.

Localization of implicated markers to putative functional regions

Enrichment analyses were conducted for three classes of epigenetic features: i) chromatin marks, which are subdivided into 15 classes; ii) DNase Hypersensitivity Sites (DHS); and iii) histone mark peaks. **Table 3** provides the 5 highest enrichment scores for each class; **Supplementary Table 2** provides complete results. For DHS, the top categories included markers with $p<0.00001$; the two top categories correspond to putatively active genomic regions in fetal brain tissue. Top active chromatin mark categories, all of which included markers with $p<0.0001$, correspond to transcription start sites or enhancers across a variety of tissues, including hippocampal cells, ovary, and hematopoietic stem cells. Finally, top enrichment scores for histone marks correspond to markers with $p<0.00001$, and map to brain, lung, spleen, blood, and embryonic stem cells.

Discussion

Genetic factors are known to influence alcohol use phenotypes including initiation, frequency of use, and alcohol use disorder. Prior studies have illustrated that there is variation in the development of alcohol use over time, with adolescence into young adulthood comprising a critical period for the establishment of alcohol use patterns that can be predictive of later problems. We demonstrate that growth in alcohol misuse is moderately heritable (h^2_{SNP}=0.26), and that genes contributing to growth represent biologically plausible candidate genes. Furthermore, the low co-heritability between initial (age 16.5) alcohol misuse and slope indicates that genetic factors influencing distinct aspects of the development of alcohol misuse are largely, though not entirely, independent. Indeed, risk factors, genetic or otherwise, impacting alcohol misuse may only partially overlap with risk factors for alcohol consumption, initiation, etc. We observed support for implicated variants, in aggregate, in a US replication sample, suggesting that genetic factors influencing changes in alcohol misuse in the UK are generalizable to an ethnically similar population. Exploratory *in silico* molecular analyses indicate that implicated variants map to genomic locations transcriptionally active during brain development.

The growth model demonstrates that AUDIT scores increase from age 16.5 through 20.75 in a non-linear fashion, with the inclusion of both quadratic and cubic terms contributing to model fit. Previous studies of samples in a similar age range have also shown that alcohol use/misuse increases during this period (Casswell et al., 2002; Jackson et al., 2008; Tucker et al., 2003). Though not all prior studies have included a non-linear growth term in their longitudinal models, Marmorstein (2009) reported that a quadratic term improved model fit when examining alcohol use-related problems in a large sample of individuals in their adolescence into early adulthood. In that sample, alcohol problems peaked at 22, followed by a gradual decline. Similarly, Walden et al.

(2007) reported nonlinear growth in alcohol consumption and alcohol dependence symptom counts. We included the quadratic term as a covariate in our analyses (the cubic term was excluded as its variance was fixed to 0), but focused on the slope term as the outcome of interest given its interpretable nature. Future studies may benefit from analysis of genetic influences on the non-linear components of growth in alcohol misuse, and we note that the current study's focus on the slope represents a limited perspective on genetic influences on change in alcohol misuse. Joint consideration of the growth factors (e.g., a multivariate GWAS) may have had an impact on our results and their interpretation.

Walden et al. (2007), using a sample of adolescent twins, found that a parental history of alcohol problems and/or higher parental alcohol consumption predicted greater rates of change in offspring alcohol outcomes. Given that a proportion of the risk conferred by parental problems is genetic, those results are conceptually consistent with the current findings, in that genetic liability contributes to the course of alcohol misuse during this critical developmental period.

The heritability estimate of the slope obtained from observed variants is consistent with, though modestly lower than, estimates for other alcohol-related phenotypes. Evidently, and unsurprisingly, environmental factors account for a substantial proportion of risk in course of alcohol problems during this time frame. Such factors might include peer behavior (Barnett et al., 2014; Bertholet et al., 2013) or college attendance (Carter et al., 2010; Slutske, 2005). Though outside the scope of the current analyses, future studies might assess whether genetic liability for increasing alcohol problems over time is moderated by specific environmental protective or risk factors.

Our findings suggest two genes, *KLHL14* and *LMX1A*, warrant further investigation based on SNP-level findings. *KLHL14* is expressed in neuronal cell bodies,

and the protein interacts with the TOR1A protein (encoded by *torsin family 1, member A*), which is expressed in the substantia nigra pars compacta, a region that is responsive to ethanol infusion (Asyyed et al., 2006) and ethanol withdrawal (Kozell et al., 2005) in mice. *LMX1A*, proximal to the set of SNPs nominally implicated ($p \leq 1.19e\text{-}6$) on chromosome 1, is of potential interest based on its known function: in addition to its role in insulin gene transcription, it is involved in the embryonic development of dopaminergic neurons (Doucet-Beaupre et al., 2015), which are central to the neurobiology of drugs of abuse (Korpi et al., 2015). In addition, preliminary evidence suggests an association between variation in *LMX1A* and cognitive functioning and psychiatric disorders (Bergman et al., 2010; Rolstad et al., 2015). Thus, although these genes have not been directly associated with alcohol-related outcomes in prior studies, they represent biologically plausible candidates for follow-up. Molecular follow-up of implicated genes and putatively functional polymorphisms is ongoing.

Our attempts at replication using meta-analytic results, which were derived from three longitudinally assessed samples of comparable ages (Adkins et al., 2015), provide additional support for our results, and suggest that the current findings are generalizable. Although comparisons of significance of individual markers did not strongly implicate specific loci, sign tests indicate that the direction of effect is consistent across studies more frequently than expected by chance. This was true for markers meeting relatively stringent significance thresholds as well as for markers meeting higher *p*-value thresholds. This is consistent with the polygenic nature of alcohol use phenotypes: we expect many genetic variants to incrementally impact the trajectory of alcohol use from adolescence into emerging adulthood. We note that the strength of the replication using this method is modest: only a small number of markers meet the more stringent thresholds, thereby reducing statistical power, and while the large number of markers

meeting less stringent thresholds conveys higher power, the proportion of markers with the same direction of effect at those thresholds only slightly exceeds 50%. We therefore caution against over-interpretation of the sign test results.

Our exploratory enrichment analysis provides insight as to the potential functional role of markers implicated at various *p*-value thresholds. Results suggest that markers with $p<0.00001$ disproportionately map to open chromatin (indicated by DHS or H3K4me1 marks) in brain tissue. Fetal brain tissue is of particular relevance, implying that these markers play a role in CNS development. Further analyses are planned to investigate whether genotypes at the implicated loci have potential functional consequences, such as differential expression of proximal genes, in the interim the current findings should be considered preliminary.

Limitations

The refined phenotype limited our ability to attempt replication in other datasets. While the AUDIT does include items related to alcohol consumption, the total score used in the current analyses is designed to capture problems/misuse, and in particular our analysis of growth in this construct was relatively novel. Though comparable phenotypic analyses (i.e., growth models of alcohol misuse) exist, there is, to our knowledge, only one published report of a genetic analysis of the slope of a longitudinally assessed alcohol outcome (Adkins et al., 2015). We observed inconsistent evidence of replication, with top markers failing to replicate across studies. However, sign tests, which investigate replication at the aggregate level, did provide modest support for common SNP effects across samples. These findings warrant confirmation in additional studies. However, we note that phenotype definition is critical for valid replication attempts: the low (and non-significant) coheritability between the intercept and slope terms within the current sample suggests that replication using a more standard phenotype (e.g., a cross-sectional measure of alcohol misuse) would not be informative, as variants would not be

expected to impact both measures. Furthermore, this may have impacted the somewhat modest level of replication we observed, as Adkins and colleagues employed a measure of alcohol consumption rather than problems: there is likely incomplete overlap among the factors – genetic or otherwise – that impact various alcohol-related outcomes such as problems vs. consumption.

The ALSPAC sample is homogenous with respect to ethnicity. While this makes the sample ideal for genetic analysis, it does present limitations with respect to generalizability to other samples. Environmental factors that impact alcohol outcomes differ across cultures; for example, the legal drinking age in the UK is younger than in the US, and light alcohol consumption among early adolescents is sanctioned within some cultures but not others. One straightforward consequence of cross-sample comparability is that such environmental influences affect heritability estimates. However, the genetic etiology of alcohol problems is not known to differ substantially across populations, with the important exception of variation within alcohol metabolizing genes being far more common within East Asian populations (Edenberg, 2007).

Despite these concerns, the results presented herein represent a contribution to emergent evidence that the course of alcohol use phenotypes has a substantial genetic component. While phenotypic studies have long acknowledged the essential developmental aspect of alcohol problems, the application of genetic approaches to this aspect of etiology is relatively nascent. Further clarification of these genetic factors is critical to improving our understanding of how alcohol misuse unfolds during development.

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Figure Legend

Figure 1. Regional association plot of the top marker (rs6506977, in purple) mapping to the region 3' of *KLHL14*, created by LocusZoom (Pruim et al., 2010).

Table 1. Mean (SD) AUDIT scores and number of participants with valid data at each age.

Age	N	% Male	Mean (SD)	Skewness	Cronbach's α
16.50	4660	41.2	6.29 (5.29)	1.09	0.78
17.50	3929	43.9	6.94 (4.89)	1.10	0.76
18.75	3100	36.2	7.80 (5.06)	0.78	0.78
20.75	3772	39.4	8.88 (5.45)	0.81	0.77

Table 2. Sign test results.

***P*-value Bin**	**# with Consistent Sign**	**Total # in Bin**	***P*-value**
p≤0.00001	9	13	0.1334
p≤0.0001	69	114	0.01539
p≤0.001	411	821	0.5
p≤0.01	4105	8240	0.6336
p≤0.10	36312	71856	0.002109
p≤0.25	81360	161723	0.00663
p≤0.50	144472	286659	9.95E-06

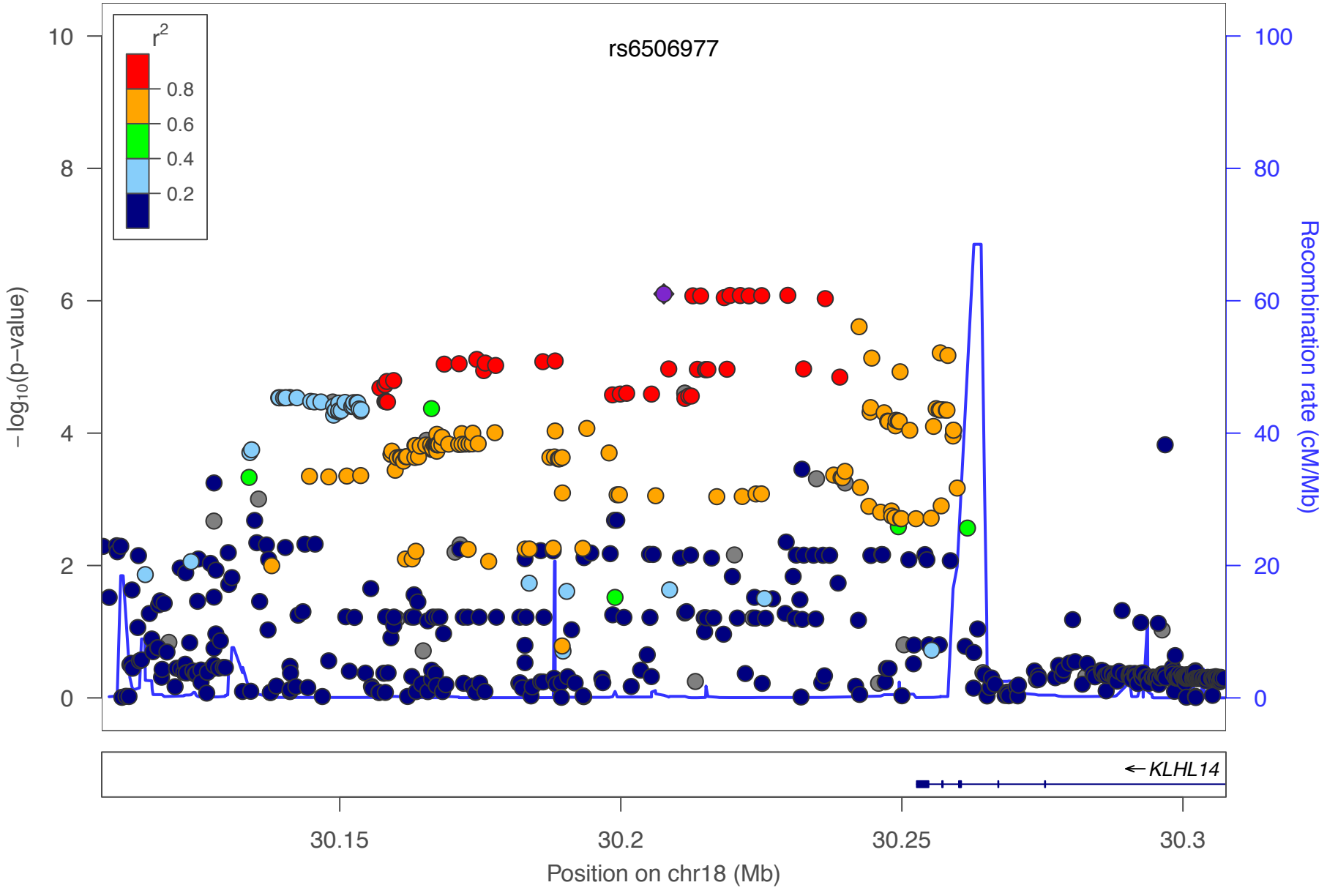
Table 3. Top five enrichment scores for each class of epigenetic mark.

Class	P-value Threshold	Type (if applicable)	# Markers	Enrichment Score	p-value	q-value	Tissue
DNase Hypersensitivity Site	0.00001	NA[1]	7	3.2476	1.48E-03	2.94E-01	Fetal Brain Female
	0.00001	NA	7	3.0431	2.22E-03	2.94E-01	Fetal Brain Male
	0.00001	NA	5	2.6031	1.29E-02	5.15E-01	H1 Derived Neuronal Progenitor Cultured Cells
	0.00001	NA	7	2.2289	1.36E-02	5.15E-01	Fetal Lung
	0.00001	NA	4	2.1409	3.99E-02	7.69E-01	HepG2 Hepatocellular Carcinoma Cell Line
Chromatin Mark	0.0001	Bivalent/Poised TSS[2]	3	21.9606	1.29E-05	2.44E-03	Ovary
	0.0001	Bivalent/Poised TSS	5	14.1634	1.96E-06	7.12E-04	H1 BMP4 Derived Trophoblast Cultured Cells
	0.0001	Bivalent Enhancer	7	13.8871	6.46E-08	7.33E-05	Primary T cells from cord blood

	0.0001	Bivalent/Poised TSS	3	13.3484	8.84E-05	9.17E-03	Primary hematopoietic stem cells
	0.0001	Bivalent Enhancer	11	11.6911	4.00E-10	1.02E-06	Brain Hippocampus Middle
Histone Mark Peaks	0.00001	H3K4me1_Enh	21	2.4863	2.48E-05	1.01E-03	Fetal Brain Female
	0.00001	H3K4me3_Pro	9	2.3770	4.66E-03	7.67E-02	Fetal Lung
	0.00001	H3K4me1_Enh	27	2.1450	2.74E-05	1.07E-03	Spleen
	0.00001	H3K4me1_Enh	15	2.1009	1.88E-03	3.67E-02	ES-WA7 Cells
	0.00001	H3K4me1_Enh	15	2.0685	2.20E-03	4.17E-02	Primary T cells effector/memory enriched from peripheral blood

[1]DNase Hypersensitivity Sites are not categorized into genomic locations by the Roadmap Project.

[2]TSS=transcription start site


rs6506977
r2
0.8
0.6
0.4
0.2
10
8
6
4
2
0
100
80
60
40
20
0
−log10(p−value)
Recombination rate (cM/Mb)
←KLHL14
30.15
30.2
30.25
30.3
Position on chr18 (Mb)

Supplementary Table 1. SNP replication across cohorts included in Adkins et al., 2015. The cohorts were the Virginia Twin Study on Adolescent Behavioral Development (VTSABD); the Christchurch Health and Development Study (CHDS); and the Great Smokey Mountain Study (GSMS). Columns at_p, ct_p, and gt_p report p-values for combined t-statistics; columns beginning with "fish_" represents p-values combined per Fisher's method.

						Combined t-statistic p-value				Fisher's method p-value			
SNP	**CHR**	**A1**	**FREQ**	**BETA**	**P**	**VTSABD**	**CHDS**	**GSMS**	**All samples**	**VTSABD**	**CHDS**	**GSMS**	
rs10035899	5	A	0.6328	-0.0523	0.0009435	0.93179548	0.44395769	0.41075024	0.02551075	0.00706533	0.00367685	0.00343196	
rs10039368	5	T	0.9577	-0.1395	0.0002495	0.24173825	0.28311329	0.57802182	0.00329811	0.00064632	0.00074578	0.00141969	
rs10043528	5	G	0.326	-0.0541	0.0009093	0.05015194	0.34710712	0.53722833	0.00294281	0.00050143	0.00285986	0.00421292	
rs10057613	5	G	0.5834	0.0615	6.56E-05	0.09176812	0.72795194	0.35062087	0.0007741	7.84E-05	0.00052295	0.00026869	
rs10057784	5	A	0.8601	0.0852	0.0001064	0.59054354	0.64165738	0.04076613	0.00081649	0.00067075	0.00072314	5.79E-05	
rs1006173	4	G	0.8848	-0.0893	0.0002394	0.76856269	0.72371057	0.44704036	0.01259242	0.00176645	0.00167378	0.00108546	
rs1007126	20	A	0.5445	0.0532	0.0004902	0.56231376	0.96409585	0.05863197	0.00466501	0.00253495	0.00409142	0.0003293	
rs1007631	16	A	0.45	0.0535	0.0003798	0.26827148	0.49594078	0.26128524	0.00411551	0.00103842	0.00180394	0.001014	
rs10097659	8	G	0.6786	0.0547	0.0007839	0.22659729	0.79626044	0.69401621	0.01804433	0.00171161	0.00523011	0.0046333	
rs1009859	1	G	0.6418	-0.0585	0.0005086	0.58839808	0.74635513	0.09017778	0.00565907	0.00272751	0.00336945	0.00050404	
rs10118416	9	G	0.7348	0.059	0.0008752	0.96123328	0.195339	0.7897574	0.02199434	0.00679797	0.00165389	0.00572109	
rs10132666	14	G	0.9132	-0.0894	0.0008875	0.94522071	0.04428453	0.94654356	0.00856636	0.00678106	0.000438	0.00678938	
rs10135315	14	C	0.846	-0.0811	0.0001325	0.42554067	0.14206199	0.06605792	0.00032963	0.00060801	0.00022363	0.00011069	
rs1014628	16	G	0.3739	0.0535	0.0007751	0.16360068	0.94973253	0.49860499	0.0126723	0.00126463	0.0060467	0.00342352	
rs10153352	18	C	0.5136	0.057	0.0002419	0.42492416	0.02745388	0.56180534	0.00079347	0.00104668	8.58E-05	0.0013459	
rs10158645	1	G	0.1493	0.0722	0.0006883	0.03844884	0.45780288	0.75841315	0.00312257	0.00030539	0.00285568	0.00446731	
rs10176121	2	C	0.4703	0.0598	8.99E-05	0.35835638	0.69198505	0.26983479	0.00225365	0.00036524	0.00066437	0.0002819	
rs10178320	2	T	0.2588	-0.0684	9.33E-05	0.65850385	0.42474781	0.02868251	0.00043589	0.0006573	0.00044135	3.70E-05	
rs10182407	2	T	0.5866	-0.0594	0.0002402	0.09473078	0.42461281	0.59327429	0.00217208	0.00026602	0.00103936	0.00140454	
rs10194124	2	G	0.2582	-0.0685	9.04E-05	0.64257637	0.49739999	0.03395052	0.00054121	0.00062447	0.0004949	4.20E-05	
rs10199504	2	A	0.4695	0.0607	6.96E-05	0.36202588	0.70807449	0.27077593	0.00190296	0.00029208	0.0005382	0.00022393	
rs10211389	2	G	0.7164	0.0617	0.0002365	0.92361743	0.48331109	0.1487964	0.00469378	0.00205963	0.00115179	0.00039606	
rs1021598	18	A	0.7016	-0.0741	1.10E-05	0.29377034	0.51247566	0.73374675	0.00064038	4.39E-05	7.35E-05	0.00010238	
rs1021599	18	G	0.7016	-0.0741	1.10E-05	0.29453275	0.51261641	0.72918224	0.00063866	4.40E-05	7.35E-05	0.00010179	
rs10233081	7	A	0.6507	-0.0564	0.0004202	0.96075796	0.84007726	0.89664126	0.03965447	0.00355863	0.00315902	0.00334717	
rs10242	10	T	0.97	0.1556	0.0004017	0.37579831	0.86086732	0.29516427	0.00913325	0.00147916	0.00310179	0.00119042	
rs1025299	5	G	0.9702	-0.1629	0.0002636	0.34363543	0.60131108	0.45461602	0.00660412	0.00093384	0.00154539	0.00120189	

rs10253843	7	C	0.2407	-0.0601	0.0006434	0.67684414	0.34327134	0.89450682	0.0224621	0.0038057	0.00208006	0.00486908
rs10259821	7	G	0.6507	-0.0566	0.0004001	0.96027508	0.84005879	0.88817654	0.03809489	0.00340573	0.00302432	0.00317776
rs10269209	7	C	0.6828	-0.0614	0.0005877	0.25126129	0.86873715	NA	0.00642871	0.00145016	0.00438058	0.0005877
rs10269243	7	A	0.2404	-0.0598	0.0006867	0.72909817	0.34048949	0.91928034	0.02510829	0.00430556	0.00218873	0.00528233
rs10273051	7	T	0.9555	-0.1335	0.000808	0.75442126	0.48557048	0.56951064	0.02642048	0.00512209	0.00346962	0.00399604
rs10282411	7	C	0.4353	0.0524	0.0005634	0.69850283	0.25245164	0.31179805	0.00779991	0.003479	0.00140212	0.00169465
rs1029236	3	T	0.5784	0.0545	0.0004365	0.16942789	0.5197146	0.70209011	0.00704078	0.00077742	0.00213044	0.00278587
rs1029652	19	T	0.308	-0.0582	0.0003855	0.34558319	0.91546948	0.30069929	0.00883612	0.00132203	0.00315832	0.00116645
rs1029845	19	C	0.2962	0.0633	0.0001274	0.32383429	0.62597696	0.46156699	0.00380822	0.00045777	0.00083231	0.00063163
rs1029931	12	T	0.7296	0.0574	0.0008234	0.99090161	0.52358507	0.7858203	0.0424004	0.006618	0.00377192	0.00539835
rs1035149	7	G	0.6185	0.0523	0.0007698	0.05095447	0.79224118	0.34011733	0.00347496	0.00043721	0.00512427	0.00242129
rs1037272	13	G	0.8392	-0.0751	0.0002508	0.54477614	0.17322476	0.35741722	0.00293096	0.00135239	0.0004798	0.00092506
rs1038980	1	A	0.717	-0.066	9.00E-05	0.66411822	0.62913607	0.57314045	0.00595499	0.00064123	0.00061052	0.00056099
rs10405032	19	A	0.9284	-0.1074	0.0002337	0.42118098	0.45541593	0.72263508	0.00806239	0.00100656	0.00108006	0.00163582
rs1041158	10	A	0.0868	-0.0971	0.0003133	0.19764213	0.5142636	0.54807348	0.00508148	0.00066192	0.00156823	0.0016604
rs1042122	19	T	0.8448	0.0705	0.0006215	0.8541754	0.78118927	0.10430442	0.00997616	0.00453416	0.0041901	0.00068999
rs10423897	19	T	0.6558	-0.0607	0.0001904	0.02417568	0.89874755	0.20276556	0.00047759	6.12E-05	0.00165528	0.00043093
rs1044167	19	C	0.6951	0.0615	0.0001794	0.97871087	0.39856162	0.44696638	0.00785612	0.0016939	0.00075404	0.00083643
rs10444056	10	T	0.8931	-0.0842	0.0005736	0.80616115	0.0668996	0.60486936	0.00535479	0.00401331	0.00042856	0.00311089
rs10464078	5	A	0.5897	0.0512	0.0009287	0.59468186	0.97740277	0.48270446	0.03569273	0.00469519	0.00726587	0.00390462
rs10488407	7	G	0.854	0.075	0.0004237	0.58000312	0.00483807	0.3920271	0.00029751	0.0022882	2.89E-05	0.00161167
rs10490375	2	A	0.4964	0.0609	9.59E-05	0.2699985	0.3278092	0.06737492	0.0003509	0.0002993	0.00035729	8.37E-05
rs10492044	12	T	0.7785	-0.0662	0.0003321	0.43351822	0.95166127	0.35882199	0.01095567	0.00141753	0.00286326	0.00119582
rs10492690	13	C	0.7744	-0.0608	0.0008317	0.79509437	0.99927469	0.9857907	0.06583003	0.00550273	0.00672587	0.00664625
rs10492692	13	G	0.7744	-0.0608	0.0008288	0.78602174	0.98595039	0.99186249	0.06488232	0.00543072	0.00662687	0.00666169
rs10496922	2	A	0.8871	0.0778	0.0008761	0.74780665	0.85361892	0.59195679	0.04200286	0.00545785	0.00613114	0.00444159
rs10497627	2	C	0.5209	-0.0542	0.0004228	0.71845114	0.90445216	0.34440745	0.01757785	0.002764	0.00339154	0.00143206
rs10497771	2	C	0.841	0.0692	0.0009394	0.61189153	0.42784938	0.79891981	0.02938943	0.00486374	0.00354465	0.00615021
rs10505665	8	G	0.877	0.0838	0.0009577	0.1341174	0.14638466	0.336577	0.00234464	0.00127931	0.00138405	0.00291392
rs10508003	13	A	0.7544	0.0593	0.0007098	0.35515108	0.85747242	0.89929636	0.02917233	0.00234081	0.00511514	0.00533423
rs10515165	5	A	0.4791	0.0493	0.0009639	0.09701085	0.57536079	0.16490887	0.00303999	0.00096103	0.00471251	0.00154932
rs10517576	4	T	0.9762	-0.1827	0.000931	0.59594365	0.00867558	0.49277188	0.00109093	0.00471426	0.00010279	0.00398532
rs10518089	4	G	0.7783	0.0636	0.0006114	0.65414313	0.55730693	0.22331928	0.01105522	0.00352917	0.00306132	0.00135157

rs10519552	15	G	0.8056	-0.0665	0.0005097	0.35785326	0.05904291	0.24391392	0.00118212	0.00175272	0.00034341	0.00124231
rs10519634	15	T	0.3869	0.0523	0.0007135	0.3507139	0.30646056	0.09112029	0.00253077	0.00232546	0.00206152	0.00069181
rs10519635	15	C	0.3868	0.0523	0.0007182	0.35928764	0.30043586	0.09537557	0.00264322	0.00239007	0.00203717	0.00072531
rs1054657	10	C	0.9666	0.1513	0.0002865	0.44158083	0.75194202	0.3738342	0.00863802	0.00126199	0.00203429	0.00108621
rs1058010	14	A	0.9254	-0.1061	0.0002732	0.6949655	0.52617949	0.35467795	0.00861478	0.00181685	0.00141559	0.00099242
rs10740814	10	C	0.3627	-0.0542	0.0006987	0.86769726	0.98635768	0.78801562	0.05320772	0.00509756	0.00570633	0.00468248
rs10743980	12	T	0.4311	0.0502	0.0009109	0.77852697	0.27175958	0.03205182	0.00230125	0.00585159	0.00230315	0.00033405
rs10745796	12	A	0.9519	0.1283	0.0002803	0.26129159	0.15319903	0.15824964	0.00086801	0.00077061	0.00047475	0.00048896
rs10755174	4	C	0.7786	0.0639	0.0005411	0.65218611	0.64925332	0.21868488	0.01110853	0.0031582	0.00314558	0.00118828
rs10756981	9	G	0.3207	0.0589	0.0003123	0.70707953	0.66437054	0.5549212	0.01578436	0.00207973	0.00196703	0.00167418
rs10763807	10	A	0.8608	0.0752	0.0006738	0.18391644	0.73813592	0.82417269	0.01493627	0.00123871	0.00428035	0.00471804
rs10766073	11	G	0.7231	-0.0598	0.0004798	0.05817682	0.30003855	0.47333032	0.0016313	0.00032062	0.00141741	0.00213253
rs10810995	9	T	0.353	0.0564	0.0003802	0.26860409	0.48924652	0.51956621	0.00684059	0.00104057	0.0017838	0.00188246
rs10815018	9	A	0.6598	0.0534	0.0008297	0.08748124	0.51358714	0.33755727	0.00396811	0.00076436	0.00373317	0.00257118
rs10825356	10	G	0.5059	0.0521	0.0005692	0.60937775	0.51934351	0.39029956	0.01420396	0.00311013	0.00269788	0.00209098
rs10828121	10	C	0.9145	0.0907	0.0007125	0.00902627	0.89397979	0.06382565	0.00024508	8.33E-05	0.00532423	0.00050016
rs10832021	11	G	0.2886	0.0563	0.0008723	0.0877464	0.4632904	0.33882959	0.00383124	0.00080197	0.0035619	0.00269748
rs10866605	5	C	0.3473	-0.057	0.000367	0.19254579	0.35402834	0.86258849	0.00595913	0.00074604	0.0012926	0.00286748
rs10876135	12	A	0.0361	-0.1515	0.0002349	0.07904776	0.34399197	0.00586511	3.74E-05	0.00022085	0.00084226	2.00E-05
rs10886462	10	A	0.7096	0.0547	0.0008917	0.23302967	0.51852119	0.93656505	0.01840283	0.00196966	0.00401294	0.0067545
rs10906829	10	C	0.9679	0.1529	0.0003283	0.36129513	0.92546123	0.28474485	0.0078521	0.00119083	0.00276455	0.00096078
rs10915584	1	G	0.4694	-0.0541	0.0003723	0.04792345	0.58242494	0.71890047	0.00266423	0.00021292	0.00204615	0.00246927
rs10915587	1	C	0.4151	-0.053	0.0005687	0.12269073	0.23525989	0.44656505	0.00262573	0.00073753	0.00132712	0.00235634
rs10918127	1	C	0.3809	0.0558	0.0003388	0.34769086	0.76307983	0.7831796	0.01421727	0.00118346	0.00239413	0.00245029
rs10935302	3	A	0.6847	-0.0552	0.0006737	0.29456987	0.26488033	0.90237361	0.01067285	0.00189025	0.00171869	0.00510992
rs10935303	3	T	0.6842	-0.0542	0.0008264	0.29256306	0.26466465	0.90272327	0.01232062	0.00225515	0.00206202	0.00611786
rs10935304	3	C	0.6847	-0.055	0.0007062	0.2907808	0.26441642	0.90460978	0.0109484	0.00194893	0.00178997	0.00533802
rs10935306	3	C	0.6888	-0.0541	0.0009634	0.30111037	0.37514521	0.94641517	0.01867254	0.00265296	0.0032258	0.00729432
rs10936027	3	T	0.8827	-0.0898	0.0001683	0.08085181	0.93477112	0.97123031	0.00391302	0.00016608	0.00153502	0.00158864
rs10946219	6	G	0.6656	-0.0543	0.0008881	0.20908784	0.67423243	0.59163888	0.0147481	0.00178104	0.00504214	0.00449314
rs10950900	7	G	0.9146	0.0908	0.0009621	0.5057645	0.88428384	0.74426884	0.04107078	0.00419839	0.00686517	0.00590159
rs10951240	7	A	0.6168	0.0527	0.0007112	0.04866593	0.81280478	0.32491419	0.00311009	0.00039011	0.00488803	0.00216585
rs10952333	7	T	0.6812	0.0697	1.83E-05	0.30019201	0.67817679	0.28003724	0.00056918	7.21E-05	0.00015277	6.76E-05

rs1098938	2	T	0.256	-0.0649	0.0002124	0.58930542	0.55953002	0.18645685	0.00408132	0.00124991	0.00119292	0.00044105
rs11021024	11	A	0.453	-0.056	0.0002433	0.29862303	0.87750893	0.52528186	0.00826326	0.00076504	0.00201796	0.00127354
rs11022765	11	C	0.7485	-0.059	0.0008396	0.05923837	0.19084803	0.46175881	0.001764	0.00054256	0.00156052	0.00343313
rs11023437	11	A	0.4748	-0.0533	0.0008748	0.28219988	0.92825911	0.299222	0.01394955	0.00229752	0.00659049	0.00242077
rs11054799	12	C	0.7428	-0.0666	0.0009442	0.60972328	0.41837308	0.23568475	0.01216561	0.00487038	0.00349069	0.00209414
rs1105721	11	G	0.6483	0.0773	2.28E-06	0.52456754	0.06899354	0.66962396	5.17E-05	1.75E-05	2.62E-06	2.20E-05
rs11068156	12	A	0.7502	0.0642	0.0002557	0.52123391	0.39768822	0.89422651	0.01066679	0.00132254	0.00103657	0.00214553
rs11068157	12	T	0.7674	0.0689	0.0001334	0.39449198	0.36379239	0.90820944	0.00506713	0.00057111	0.00053059	0.00121379
rs11083030	18	G	0.4072	-0.0614	6.35E-05	0.42381094	0.44330185	0.29781463	0.00149825	0.00031024	0.00032324	0.00022468
rs11090351	22	G	0.8981	0.1086	1.42E-05	0.64229648	0.77111452	0.34855184	0.00111711	0.00011467	0.00013567	6.52E-05
rs11096738	4	T	0.9036	0.0863	0.0007431	0.14178193	0.03489295	0.70028504	0.00116356	0.00107024	0.00029974	0.00445496
rs11124253	2	A	0.3099	0.0586	0.000351	0.56342557	0.08343446	0.47409349	0.0027602	0.00188437	0.00033498	0.00161433
rs11124785	2	A	0.466	0.0614	5.90E-05	0.38572156	0.5084285	0.27468178	0.00137196	0.00026589	0.00034219	0.00019484
rs11133035	4	T	0.5454	0.0547	0.0004436	0.4482132	0.84219663	0.32189111	0.01171584	0.00189345	0.00332216	0.00140708
rs11158240	14	G	0.9128	-0.0935	0.000522	0.94062726	0.04765926	0.96022837	0.00614221	0.00423202	0.00028862	0.00430987
rs11169696	12	A	0.036	-0.1533	0.0002093	0.08830552	0.43892503	0.00544167	4.29E-05	0.00021992	0.00094579	1.67E-05
rs11169949	12	T	0.761	-0.0594	0.0009199	0.16778068	0.94111567	0.043517	0.00234252	0.00150889	0.00697082	0.00044538
rs11175454	12	C	0.8445	0.0752	0.0002441	0.72946058	0.54731549	0.69185272	0.01378106	0.00171533	0.0013254	0.00163584
rs11194219	10	G	0.6237	-0.0522	0.0009622	0.37137068	0.608855	0.35024706	0.01505191	0.00319343	0.00494594	0.00303152
rs11210289	1	T	0.1783	0.069	0.0005171	0.73579269	0.6673961	0.48068306	0.02106215	0.0033764	0.00309621	0.00231157
rs11216493	11	C	0.8775	-0.0903	0.0002358	0.83030389	0.67095792	0.10812112	0.00434959	0.0018675	0.00154282	0.00029516
rs11222498	11	A	0.6064	0.0541	0.0005494	0.95127571	0.13769789	0.1652422	0.00380128	0.00447196	0.00079353	0.00093571
rs11222509	11	T	0.6146	0.0606	9.86E-05	0.99150944	0.22563945	0.1003965	0.00103329	0.00100013	0.00026052	0.00012393
rs11231741	11	C	0.692	0.0557	0.0007669	0.94222684	0.77893283	0.30615114	0.02682861	0.00594887	0.00503158	0.00219687
rs11241219	5	T	0.9522	-0.1342	0.0001649	0.57251125	0.14594335	0.30887218	0.00172398	0.00096936	0.00028	0.00055441
rs11244489	10	A	0.9042	-0.0888	0.0005509	0.73652351	0.47418249	0.77085619	0.02415797	0.00357457	0.00241638	0.00372185
rs11244498	10	G	0.9141	-0.1031	0.0001245	0.35044913	0.8978275	0.17050749	0.00244427	0.00048167	0.00112886	0.00024965
rs11244501	10	T	0.9141	-0.1031	0.0001248	0.34975333	0.86674982	0.17350634	0.00241176	0.00048186	0.00109596	0.00025422
rs1124611	16	A	0.2808	0.0736	1.09E-05	0.61564463	0.96722652	0.30477127	0.00094609	8.67E-05	0.00013147	4.53E-05
rs11249609	5	G	0.7032	0.0578	0.0005967	0.52730785	0.40868826	0.15172037	0.00552542	0.00285196	0.00227255	0.00093336
rs11251508	10	C	0.5698	-0.0522	0.0005969	0.36103807	0.63967124	0.0900481	0.00392731	0.0020349	0.00338696	0.00058217
rs11251509	10	A	0.5697	-0.0523	0.0005768	0.39757154	0.80342141	0.09230676	0.00498334	0.00215111	0.00402099	0.00057718
rs1125317	18	A	0.748	-0.0694	9.04E-05	0.25836131	0.85013982	0.51763915	0.00340055	0.00027233	0.0008046	0.00051312

rs11255686	10	A	0.5318	0.0543	0.0005202	0.76119435	0.01733975	0.92137237	0.00234402	0.00349809	0.0001138	0.00414266
rs11259519	10	A	0.9697	0.1985	7.79E-06	0.40150255	NA	0.97561748	0.00028788	4.28E-05	7.79E-06	9.72E-05
rs11259520	10	T	0.9679	0.1813	1.92E-05	0.76518473	NA	0.9591509	0.0010524	0.00017852	1.92E-05	0.00021961
rs11259527	10	G	0.9547	0.1318	0.0003142	0.52557193	0.52512068	0.26821554	0.0063025	0.00160325	0.00160202	0.00087488
rs1126047	16	G	0.4525	0.0541	0.000319	0.96911019	0.03589211	0.36962436	0.0016751	0.00280757	0.00014172	0.00118448
rs11526191	7	C	0.9231	-0.0952	0.0007687	0.38214834	0.53785431	0.79315853	0.02145774	0.00268281	0.00363462	0.00512304
rs11573185	1	C	0.4595	-0.0497	0.0009939	0.66252257	0.71859341	0.22723591	0.01925255	0.00548223	0.00588819	0.002122
rs11573219	1	T	0.5848	-0.0512	0.0008796	0.07113987	0.42187636	0.42853842	0.00365969	0.00066824	0.00330229	0.00334854
rs11573222	1	G	0.584	-0.0512	0.000907	0.06143404	0.41721119	0.44139827	0.00339745	0.00060151	0.00336011	0.00353234
rs11573272	1	A	0.6007	-0.0533	0.0006312	0.14581238	0.17980578	0.38587269	0.00236101	0.00094736	0.00114444	0.00227004
rs11577582	1	C	0.8109	0.066	0.0005357	0.6183551	0.70059635	0.7876549	0.02795341	0.00298546	0.00333566	0.00370074
rs11588708	1	T	0.8041	0.0667	0.0005481	0.63217832	0.69323669	0.79668745	0.02885721	0.00310726	0.00337234	0.00381485
rs11596696	10	T	0.7103	-0.0557	0.0009583	0.38915377	0.47608561	0.02050998	0.00152674	0.00331685	0.00396581	0.00023266
rs11598010	10	A	0.9688	-0.1474	0.0007196	0.32693345	0.23642983	0.38600271	0.00593659	0.00220083	0.00164672	0.00255233
rs11603601	11	C	0.7197	0.0603	0.0008503	0.27740278	0.85154881	0.84093469	0.02645765	0.00220596	0.00595956	0.00589425
rs11613965	12	C	0.7801	-0.0673	0.0002692	0.39146493	0.9598421	0.98276051	0.01820715	0.00107047	0.00239296	0.00244385
rs11614019	12	C	0.7629	-0.0644	0.0003538	0.66983913	0.57730203	0.36430364	0.01106592	0.00221525	0.00193959	0.00128331
rs11614284	12	T	0.9661	0.1911	0.0004405	0.65438574	0.20689654	0.86736721	0.01137002	0.00263803	0.00093901	0.00338897
rs11615787	12	C	0.7102	0.0633	0.0002014	0.13053863	0.00745459	0.2848727	5.21E-05	0.00030356	2.16E-05	0.00061768
rs11618409	13	T	0.4692	0.0586	0.0001191	0.17488607	0.24599689	0.44046786	0.00104904	0.00024535	0.00033511	0.00056947
rs11618423	13	C	0.4718	0.0582	0.0001363	0.17888525	0.24997802	0.43908177	0.00119955	0.00028336	0.00038457	0.00064178
rs11632435	15	A	0.9021	-0.1099	1.87E-05	0.04538855	0.47592086	0.3288639	0.0001066	1.27E-05	0.00011218	7.98E-05
rs11636117	15	C	0.9647	-0.1368	0.0009386	0.69598326	0.53419194	0.36035739	0.02151	0.00544389	0.00431103	0.0030413
rs11651653	17	A	0.9075	0.0937	0.0002921	0.69030108	0.87939673	0.92183185	0.02585882	0.00191737	0.00238041	0.00248259
rs11667696	19	T	0.8556	-0.0726	0.0008396	0.69389494	0.53726568	0.1868406	0.01243166	0.00492177	0.0039262	0.00153108
rs11685553	2	C	0.6896	-0.0586	0.0003175	0.43783634	0.54633666	0.92935838	0.014244	0.00137358	0.00167556	0.0026935
rs11690118	2	C	0.6467	0.0564	0.0004613	0.63361465	0.47817091	0.33934732	0.01067186	0.00267085	0.0020777	0.00152818
rs11693848	2	T	0.7336	-0.0605	0.0008721	0.88811358	0.29636392	0.87708453	0.02988947	0.00632264	0.00239353	0.00625368
rs11698323	20	T	0.9663	-0.1488	0.0004351	0.00426605	0.97965337	0.4549034	0.00047226	2.64E-05	0.00373413	0.00188578
rs1170189	13	G	0.826	-0.0695	0.0005218	0.89357749	0.16150422	0.57095909	0.0099321	0.0040429	0.00087487	0.00271669
rs1170192	13	T	0.8265	-0.0697	0.0005352	0.97819278	0.226631	0.56891675	0.01379224	0.00447875	0.00121503	0.00276986
rs1170194	13	G	0.8265	-0.0697	0.0005352	0.97819278	0.22667071	0.56897914	0.01379508	0.00447875	0.00121522	0.00277013
rs11715636	3	G	0.8933	-0.0832	0.0009975	0.58839101	0.98601583	0.09765763	0.01212653	0.00495397	0.00779399	0.00099718

rs11762979	7	C	0.5773	0.0542	0.0006384	0.66881359	0.92978015	0.12505881	0.01103431	0.00373975	0.00500342	0.00083315
rs11765089	7	C	0.7137	0.0661	0.0001723	0.30617545	0.35913538	0.22056359	0.00169968	0.00057237	0.00066151	0.00042479
rs11771330	7	C	0.5689	-0.0516	0.0007889	0.17028287	0.04572898	0.23141064	0.00072766	0.00133197	0.00040513	0.00175411
rs11790910	9	A	0.9123	0.089	0.0008503	0.333625	0.80076477	0.96921049	0.03179438	0.00260069	0.00564602	0.00667635
rs11803213	1	A	0.9345	-0.11	0.000365	0.71680405	0.08047944	0.67707181	0.00436193	0.00241973	0.00033591	0.0022997
rs11803905	1	C	0.7307	-0.0621	0.0003278	0.65149084	0.70550427	0.77529563	0.02041744	0.00201847	0.0021674	0.00235783
rs11821811	11	C	0.7764	0.0666	0.000533	0.63167134	0.61242176	0.28313563	0.01241581	0.00302891	0.00294671	0.00147875
rs11838143	12	C	0.7744	-0.0641	0.0004557	0.40638781	0.93183086	0.33644514	0.01236625	0.00177674	0.00372162	0.00149991
rs11841247	13	G	0.8408	-0.0719	0.0004649	0.64975702	0.15297199	0.87055293	0.00945844	0.00275032	0.00075037	0.00356652
rs11844740	14	T	0.429	0.0543	0.000431	0.39320009	0.38557701	0.36953546	0.00648132	0.00164094	0.00161238	0.00155207
rs11846935	14	T	0.9635	-0.135	0.0008297	0.51093527	0.05455044	0.28592402	0.00242528	0.00371609	0.000498	0.00221728
rs11871549	17	C	0.1825	-0.0727	0.0007866	0.20239525	0.65008621	0.74906126	0.01523953	0.0015515	0.00438665	0.00497102
rs11880656	19	G	0.8432	0.0782	0.0003321	0.82404456	0.9157195	0.72284074	0.02777775	0.00251871	0.00276683	0.00224083
rs11886857	2	A	0.5003	0.0605	7.50E-05	0.30335805	0.35696026	0.08247091	0.00039857	0.00026596	0.00030859	8.04E-05
rs11891511	2	T	0.803	-0.063	0.0008539	0.89413659	0.10104023	0.76060544	0.01246158	0.00624362	0.00089366	0.00541624
rs11896276	2	T	0.5017	0.0609	7.26E-05	0.29137805	0.45646543	0.16269488	0.00078784	0.00024888	0.00037501	0.00014585
rs11897863	2	G	0.5002	0.0604	7.81E-05	0.29578284	0.35248543	0.08173864	0.00039667	0.00026978	0.00031667	8.28E-05
rs11915859	3	T	0.6847	-0.055	0.0007083	0.28936273	0.26408793	0.90487931	0.01092552	0.00194559	0.00179274	0.0053534
rs11925186	3	A	0.6861	-0.0535	0.0009804	0.2660104	0.34970831	0.87211319	0.01552298	0.00241283	0.00307821	0.00689521
rs11946728	4	G	0.5463	0.0549	0.0004121	0.4470715	0.84353147	0.32179366	0.01109317	0.00176855	0.0031162	0.00131658
rs11960198	5	A	0.2737	-0.0569	0.0009437	0.27132674	0.07650234	0.28054528	0.00210238	0.00237363	0.00076066	0.00244543
rs11968507	6	C	0.8419	0.0719	0.0004575	0.03962027	0.61764678	0.21616257	0.00110833	0.00021603	0.00259164	0.00101084
rs11979077	7	A	0.7622	-0.0599	0.00075	0.17638829	0.19335655	0.27645057	0.00255407	0.00131372	0.00142678	0.0019658
rs12055028	5	G	0.6876	0.0629	0.0001547	0.29166416	0.92221963	0.25435321	0.00347861	0.0004966	0.00140599	0.00043846
rs12128914	1	C	0.7786	0.0621	0.00083	0.17437038	0.88148638	0.79970945	0.01854709	0.00142421	0.0060142	0.00552088
rs12131363	1	C	0.8218	-0.0798	0.0008546	0.92846893	0.8156596	0.54249299	0.04370323	0.00645812	0.00576376	0.00402253
rs12149164	16	G	0.799	0.0768	5.66E-05	0.40549973	0.92083011	0.12991392	0.00122342	0.00026799	0.00056584	9.42E-05
rs12150218	17	G	0.6758	0.0564	0.0005301	0.13840873	0.7601951	0.46026018	0.00678402	0.00077186	0.00355292	0.00227354
rs1220565	13	T	0.561	-0.0533	0.0005687	0.46409931	0.9978806	0.2863599	0.0149407	0.00243869	0.00480911	0.00158336
rs12206518	6	T	0.5988	0.0669	1.19E-05	0.98971808	0.24031254	0.78033542	0.00102857	0.000145	3.92E-05	0.00011652
rs12206583	6	T	0.5985	0.0671	1.13E-05	0.99146235	0.23923456	0.77857322	0.00098893	0.00013937	3.75E-05	0.00011158
rs12216318	6	C	0.6516	0.0665	2.95E-05	0.5425102	0.57610552	0.59806475	0.00210515	0.00019243	0.00020333	0.00021042
rs12228865	12	C	0.9608	0.1329	0.0006687	0.21744164	0.27521499	0.60227561	0.00647223	0.00143019	0.00176682	0.00355106

rs12313137	12	G	0.8744	0.0763	0.0009049	0.99820583	0.99278121	0.46802163	0.04926116	0.00723478	0.00720036	0.00371291
rs12328227	2	A	0.8869	0.0783	0.0007933	0.81191482	0.87713526	0.56466036	0.04096281	0.00537667	0.00575481	0.00390198
rs12333620	7	G	0.7786	-0.0608	0.0008902	0.93862156	0.20158935	0.80176723	0.02261933	0.00675752	0.00172736	0.00588473
rs1233651	17	C	0.1948	0.0631	0.0009905	0.83252703	0.8284498	0.55933209	0.04626252	0.00667989	0.00665121	0.00470822
rs12344339	9	T	0.6215	0.0578	0.0008368	0.69273252	0.29882739	0.52898651	0.01717958	0.00490004	0.002324	0.00386116
rs12351138	9	T	0.9589	-0.1352	0.0004202	0.64846647	0.73637633	0.88611485	0.02742013	0.00250903	0.00280983	0.00331227
rs12405479	1	G	0.9503	-0.1225	0.0004503	0.37517506	0.90561415	0.77778184	0.02068712	0.00163636	0.00359056	0.00313702
rs12405585	1	C	0.872	-0.0764	0.0007552	0.49611002	0.43016095	0.07882582	0.00399694	0.00333055	0.00293415	0.00063869
rs12415813	10	T	0.4779	0.0544	0.0002763	0.43520024	0.49631824	0.91753729	0.01185121	0.00120558	0.00135687	0.00235265
rs12417042	11	C	0.7411	-0.0592	0.0006416	0.88140185	0.84777606	0.40542364	0.0291703	0.00479425	0.00463251	0.00240724
rs12431160	13	A	0.8339	0.0664	0.0009487	0.25873747	0.36807072	0.3258543	0.00751123	0.00228585	0.0031287	0.00280751
rs12440187	15	G	0.9709	-0.1832	0.0002479	0.60684237	0.16187168	0.45970314	0.00363047	0.00147457	0.00044636	0.00114868
rs12450893	17	A	0.6743	0.0559	0.0005935	0.14428933	0.57638735	0.43253065	0.0059115	0.00088765	0.00307208	0.00237905
rs12462846	19	A	0.9257	-0.111	0.0001392	0.28107673	0.39809013	0.73556953	0.00369511	0.0004362	0.00059851	0.00104303
rs12472523	2	C	0.6348	-0.0554	0.0004682	0.22467272	0.38709845	0.78319834	0.0079698	0.00106872	0.00174274	0.0032676
rs12481235	20	C	0.6816	0.0635	9.22E-05	0.49116169	0.88110995	0.75349398	0.00763161	0.00049845	0.00084668	0.00073493
rs12491264	3	T	0.6606	-0.0537	0.0007927	0.25507559	0.83358599	0.8962229	0.02447054	0.00192215	0.0054991	0.00586083
rs12501403	4	G	0.4804	0.0514	0.0007142	0.40833119	0.40447243	0.94389531	0.0197349	0.00266551	0.00264306	0.00559669
rs12536073	7	G	0.7878	0.0681	0.000372	0.10369042	0.96593322	0.74358533	0.00717994	0.00043059	0.00320925	0.00254288
rs12585317	13	C	0.8284	0.0803	5.54E-05	0.56566216	0.11924694	0.6268261	0.00108069	0.00035651	8.54E-05	0.00039149
rs12587122	14	A	0.255	0.0691	6.01E-05	0.66135727	0.79333162	0.14307682	0.0018034	0.00044231	0.0005219	0.00010885
rs12618138	2	T	0.9698	-0.1464	0.000941	0.24728122	0.29156289	0.05684089	0.0015966	0.00217934	0.00252441	0.00057959
rs12618194	2	T	0.9698	-0.1464	0.0009413	0.25307752	0.29298084	0.05667757	0.00162861	0.00222554	0.00253607	0.00057825
rs12623821	2	C	0.8932	-0.0918	0.0001791	0.86614186	0.34299667	0.90062475	0.01075267	0.00151578	0.00065716	0.00156983
rs12624511	20	G	0.8629	-0.0876	7.35E-05	0.14599953	0.1524045	0.39914028	0.00039048	0.00013354	0.00013891	0.00033556
rs12632107	3	G	0.6837	-0.0548	0.0007213	0.29956411	0.26530332	0.90141555	0.01136119	0.00203973	0.00182969	0.00542145
rs12635525	3	A	0.5937	0.0564	0.0002165	0.82299677	0.02644496	0.67847843	0.00137901	0.00171635	7.48E-05	0.00144332
rs12636763	3	A	0.7317	0.059	0.0006016	0.46762509	0.56384621	0.46730082	0.01475558	0.00258142	0.00304912	0.00257983
rs12649726	4	C	0.8945	-0.0891	0.0002519	0.08455054	0.9884288	0.27978201	0.00221817	0.0002504	0.00231509	0.00074425
rs12669558	7	T	0.7926	-0.0669	0.0003553	0.21942926	0.93586879	0.25019833	0.00525629	0.00081544	0.00299556	0.00091812
rs12670199	7	T	0.9252	-0.0978	0.0007367	0.63355363	0.44817124	0.84512195	0.02731069	0.00404651	0.00297676	0.0052184
rs12683683	9	A	0.7015	-0.058	0.0004798	0.24703277	0.52150927	0.39855193	0.00657893	0.00119005	0.00232534	0.00182851
rs12691654	2	G	0.5164	-0.0613	5.99E-05	0.34096389	0.15248839	0.8369463	0.00117481	0.00024094	0.0001151	0.00054641

rs12696657	3	C	0.6037	0.0602	0.0001205	0.99512235	0.0346483	0.49971647	0.00098222	0.00120257	5.59E-05	0.00064537
rs12704037	7	C	0.7108	0.0556	0.0009936	0.92722503	0.338303	0.43843789	0.02280763	0.00736087	0.00302456	0.00380686
rs12706812	7	A	0.3204	0.0655	6.49E-05	0.50103155	0.16176009	0.47388224	0.00113369	0.00036828	0.00013076	0.00035004
rs12714541	3	A	0.3581	0.0567	0.0003874	0.22877842	0.76506724	0.58741669	0.00938991	0.00091563	0.00270419	0.0021364
rs12735197	1	C	0.6757	-0.0545	0.000851	0.26735832	0.77122731	0.42110628	0.01472221	0.00213604	0.00546636	0.00320159
rs12827588	12	T	0.9484	-0.121	0.0003998	0.20127932	0.87652522	0.0880144	0.00231017	0.00083912	0.00313861	0.00039604
rs12830084	12	G	0.8345	-0.0814	5.72E-05	0.79539122	0.12312906	0.1340583	0.00043671	0.00049997	9.05E-05	9.79E-05
rs12831873	12	G	0.9478	-0.1229	0.0003258	0.2062031	0.00116709	0.29615993	2.50E-05	0.00071266	6.00E-06	0.00098863
rs12855239	13	T	0.7547	0.0577	0.0009752	0.36333033	0.80346542	0.89938064	0.03526745	0.0031695	0.00638717	0.00705074
rs12901270	15	A	0.7172	0.0624	0.0007283	0.36156887	0.17205953	0.03862013	0.00085801	0.00243373	0.00125119	0.00032286
rs12906402	15	A	0.4768	0.0626	0.0005212	0.73909973	0.58586961	0.26972113	0.01279825	0.00341369	0.00277691	0.00138748
rs12911875	15	A	0.6037	0.0511	0.0009665	0.59706335	0.33536022	0.04730649	0.00311383	0.00488053	0.00292827	0.00050262
rs12912234	15	T	0.2049	0.0747	5.98E-05	0.49755695	0.32095948	0.35046964	0.001429	0.00033976	0.00022758	0.00024666
rs12913150	15	C	0.6627	-0.0614	0.0003439	0.86532216	0.14999768	0.93706615	0.00973343	0.00271391	0.00056084	0.00291326
rs12936336	17	G	0.9361	-0.1222	8.87E-05	0.96800446	0.85062609	0.85467094	0.01302923	0.00088941	0.00079131	0.00079471
rs12936822	17	A	0.9358	-0.1245	8.48E-05	0.99331187	0.54221626	0.56308222	0.00679365	0.00087459	0.00050525	0.00052289
rs12943652	17	G	0.6727	0.0577	0.000364	0.14670456	0.67289473	0.46618583	0.00492689	0.00057874	0.00228144	0.00164287
rs12949992	17	G	0.9368	-0.1263	4.97E-05	0.96964736	0.88569493	0.85457429	0.00879704	0.00052694	0.0004853	0.00046977
rs1295085	1	A	0.3695	0.0679	1.11E-05	0.35521236	0.27703117	NA	0.00011863	5.28E-05	4.20E-05	1.11E-05
rs12964478	18	C	0.7298	-0.0575	0.0009116	0.23693971	0.77098477	0.74760735	0.02135848	0.00203904	0.00580565	0.0056506
rs12978999	19	C	0.7502	0.0659	0.0001896	0.16733793	0.74481038	0.17227396	0.00166544	0.00036037	0.00139313	0.00037005
rs12980435	19	G	0.7959	-0.0698	0.0002614	0.02463026	0.15663496	0.48649951	0.0003101	8.34E-05	0.00045462	0.00126789
rs12986266	19	T	0.8274	0.0801	0.0001426	0.86466149	0.99520925	0.85019483	0.01884411	0.00123312	0.00139934	0.00121453
rs12987477	2	T	0.4555	-0.0528	0.0004844	0.22755811	0.20133894	0.6788373	0.00454791	0.00111474	0.00099824	0.00296603
rs12995040	2	C	0.6738	0.056	0.0005201	0.68306524	0.86659425	0.78086522	0.03377668	0.00317699	0.00392333	0.00357752
rs13008814	2	G	0.9006	0.0997	0.0001143	0.60593554	0.01881082	0.69566713	0.00050813	0.00073259	3.02E-05	0.0008301
rs13018232	2	G	0.6735	0.0564	0.000477	0.68881624	0.88246027	0.78325858	0.03248078	0.00296391	0.00369287	0.00332229
rs13022034	2	C	0.7603	-0.0642	0.0005476	0.58606477	0.44424671	0.78856724	0.01987157	0.00290258	0.0022676	0.00377734
rs13028776	2	T	0.4865	-0.0567	0.0002455	0.1888714	0.11791628	0.64833112	0.001495	0.00050907	0.00033146	0.00155116
rs13033768	2	A	0.1828	-0.0673	0.0006342	0.72324743	0.33005354	0.09926586	0.00453927	0.00398465	0.0019826	0.00067192
rs13064628	3	C	0.8688	-0.0743	0.0008279	0.11316307	0.49183665	0.85984411	0.00935346	0.00096269	0.00358582	0.00587119
rs13068206	3	G	0.5083	0.0511	0.0006682	0.46408563	0.39689692	0.05655885	0.00252336	0.0028153	0.00244918	0.00042265
rs13073054	3	G	0.1999	0.0679	0.0003372	0.04494927	0.13056198	0.95844113	0.0009145	0.00018335	0.00048563	0.00292073

rs13073658	3	G	0.9117	-0.0919	0.0005741	0.35254251	0.95490653	0.54477205	0.01896716	0.00192382	0.00466465	0.00283671
rs13074860	3	T	0.5541	-0.0547	0.0004462	0.01075283	0.89951805	0.84521609	0.00152882	6.36E-05	0.0035403	0.00335006
rs13084370	3	G	0.6207	0.0536	0.0006788	0.0453115	0.4691743	0.49103938	0.00255811	0.00035031	0.00288283	0.003002
rs13091440	3	G	0.9115	-0.0924	0.0005199	0.36384695	0.96474339	0.53966318	0.01808681	0.00181085	0.00431238	0.00257527
rs13101018	3	T	0.6847	-0.0552	0.0006765	0.2946502	0.27556591	0.82680198	0.0103386	0.00189774	0.00178731	0.00474804
rs131100	22	T	0.8728	-0.0757	0.0008249	0.63237093	0.35889868	0.49219572	0.01724842	0.00446449	0.0027015	0.00357661
rs13140884	4	C	0.9036	0.0863	0.0007422	0.16381821	0.05608575	0.69840306	0.00188158	0.00121767	0.00046151	0.00443963
rs13164333	5	G	0.9606	-0.1424	0.0003488	0.15879571	0.88202002	0.25781741	0.00397095	0.00059825	0.00279546	0.00092773
rs1324065	13	T	0.3842	-0.0531	0.0007734	0.84599079	0.05271824	0.54879946	0.00540157	0.00545151	0.00045288	0.00372012
rs13289572	9	C	0.8606	0.0763	0.0009695	0.4808682	0.20292332	0.70425695	0.0136627	0.00404238	0.0018756	0.00565977
rs1331726	13	T	0.3664	-0.0541	0.000518	0.32331543	0.52648762	0.70203071	0.01295463	0.00162364	0.00251096	0.00324353
rs13322529	3	A	0.7151	-0.0588	0.0004889	0.2784401	0.55784212	0.8009821	0.01279104	0.00134794	0.00251102	0.00346381
rs13323477	3	C	0.9015	0.0898	0.0004591	0.79469	0.07142339	0.27841768	0.00260496	0.00325295	0.00037136	0.00127373
rs1333472	13	A	0.8036	0.0717	0.0001816	0.81216332	0.01328217	0.17091232	0.00022749	0.0014486	3.36E-05	0.00035322
rs13378699	13	T	0.7744	-0.0608	0.0008317	0.77152958	0.95169866	0.9947104	0.06289631	0.00535895	0.00644426	0.00669894
rs1338551	6	C	0.4331	-0.0601	8.11E-05	0.02960056	0.40415611	0.29642881	0.00020104	3.35E-05	0.00037127	0.00027976
rs13393937	2	C	0.8744	0.0776	0.0007083	0.54377693	0.1254676	0.7643423	0.00888278	0.00341321	0.00091787	0.00461334
rs1342049	1	C	0.9878	0.234	0.0007626	NA	NA	0.90771514	0.00572857	0.0007626	0.0007626	0.00572857
rs13421232	2	C	0.5581	0.0521	0.000702	0.28038123	0.67600832	0.29853007	0.00937094	0.00187639	0.00410641	0.00198471
rs13438187	7	G	0.6915	0.0642	0.0005054	0.10751809	0.85803771	0.66812019	0.00783245	0.00058797	0.00379154	0.0030368
rs1350604	10	T	0.8785	-0.0885	0.0001492	0.71470473	0.93249943	0.65642803	0.01346162	0.00108192	0.00137461	0.00100203
rs1350606	10	G	0.88	-0.0868	0.0001946	0.73560248	0.94536462	0.65645	0.01680296	0.00141024	0.00176623	0.00127304
rs1351036	3	T	0.3672	0.0545	0.0006508	0.18425841	0.52478167	0.53530617	0.00829914	0.0012026	0.00306763	0.00312224
rs1351039	3	C	0.3581	0.0569	0.0003727	0.22597782	0.76742739	0.58698289	0.00905972	0.0008744	0.00261979	0.00206244
rs1361152	10	G	0.5318	0.0541	0.00054	0.72644498	0.01562552	0.9133479	0.0021328	0.00346914	0.00010701	0.00424878
rs1361946	7	T	0.3212	0.0631	0.0001202	0.50219638	0.1650126	0.44710129	0.001786	0.00064681	0.0002346	0.00058209
rs1366840	2	C	0.4584	-0.0528	0.0005174	0.69638643	0.5848797	0.9865133	0.03056055	0.00321705	0.00275473	0.00437956
rs1369973	4	G	0.6182	-0.0521	0.0008954	0.6404162	0.4520725	0.76507309	0.02958087	0.00485343	0.00356703	0.00567631
rs1371060	5	C	0.5365	0.0585	0.000252	0.60495093	0.4074316	0.96322606	0.01263854	0.00149226	0.00104562	0.00226313
rs1372256	2	G	0.8058	-0.0743	0.0001341	0.84533647	0.08997675	0.75838942	0.00273652	0.00114323	0.00014871	0.00103668
rs1373967	5	G	0.3195	-0.0592	0.0003212	0.60084025	0.47900409	0.33433789	0.00778692	0.00184361	0.00150463	0.00108883
rs1374666	11	A	0.8321	-0.0695	0.0007432	0.32658065	0.92090696	0.28031619	0.01306878	0.00226298	0.00567173	0.00197422
rs1382066	3	C	0.4259	0.0545	0.0003905	0.42079232	0.70717077	0.4093297	0.01069434	0.00159615	0.00253908	0.00155708

rs1382069	3	T	0.3581	0.0567	0.0003874	0.22877842	0.76506724	0.58741669	0.00938991	0.00091563	0.00270419	0.0021364
rs1390890	5	G	0.7086	0.0583	0.0005316	0.55483563	0.27405286	0.14351001	0.00373021	0.00269252	0.00143269	0.00079959
rs1391451	18	T	0.4705	-0.051	0.0008366	0.81974604	0.92772221	0.82899743	0.05732487	0.0056818	0.00633416	0.00573814
rs1392543	4	C	0.8856	-0.09	0.0002186	0.76929086	0.7238056	0.4469049	0.01179424	0.00162963	0.00154292	0.00099976
rs1392544	4	G	0.884	-0.0837	0.0004879	0.65322421	0.8018701	0.39981416	0.01856705	0.0028847	0.00346092	0.00186138
rs1396190	4	C	0.7015	-0.0614	0.0005686	0.44240506	0.90368569	0.32224274	0.01463045	0.00233638	0.00440543	0.00175986
rs1404988	5	T	0.1296	0.09	0.0005533	NA	NA	0.77718324	0.00376336	0.0005533	0.0005533	0.00376336
rs1426723	18	G	0.5558	0.0641	2.92E-05	0.5561676	0.80243144	0.18795839	0.00111948	0.00019546	0.00027341	7.20E-05
rs1430006	3	C	0.2518	0.0649	0.0003032	0.70976558	0.53354286	0.01973756	0.00105247	0.00203234	0.00157392	7.80E-05
rs1435135	4	C	0.6052	-0.0513	0.000966	0.78986107	0.51962079	0.58937175	0.03312398	0.00624005	0.0043153	0.00482285
rs1438937	5	G	0.5525	0.0527	0.000613	0.1782119	0.81874391	0.67251561	0.01268812	0.00110576	0.00431481	0.00362529
rs1447200	2	A	0.4925	-0.0554	0.0002996	0.19597799	0.13178444	0.62273006	0.00189871	0.00063076	0.00043982	0.00178859
rs1448621	2	T	0.9243	0.1067	0.0002565	0.94550102	0.49307922	0.62221873	0.01479591	0.00226137	0.00126165	0.00155495
rs1449506	13	T	0.8399	-0.0739	0.0003263	0.55828565	0.15594613	0.82572388	0.00634274	0.00175075	0.00055393	0.00248396
rs1453774	2	T	0.4916	0.0514	0.0007007	0.80928024	0.83717153	0.99927417	0.05344408	0.00480588	0.00495163	0.00578649
rs1462947	4	G	0.6715	0.0643	6.40E-05	0.34129344	0.43534116	0.51331652	0.00191831	0.00025632	0.00032018	0.00037211
rs1463146	2	G	0.9236	0.1067	0.0002384	0.97280823	0.48260683	0.62507045	0.01415336	0.00217286	0.0011586	0.00146207
rs1469513	2	T	0.5696	0.0512	0.0009606	0.72749034	0.83175524	0.78103404	0.05190631	0.00577658	0.00649747	0.00614846
rs1475036	14	A	0.8077	-0.0649	0.0005931	0.48483747	0.45798441	0.38994627	0.01130993	0.00263232	0.00250201	0.0021675
rs1480898	4	G	0.8575	0.0721	0.0008243	0.5798199	0.45768501	0.60812997	0.02238032	0.00413232	0.00335112	0.00431019
rs1482531	18	T	0.3427	-0.059	0.0001864	0.94587815	0.39626611	0.47407949	0.00819617	0.00170022	0.00077655	0.0009132
rs1507055	18	T	0.4999	0.0543	0.0003953	0.23542122	0.2482566	0.73396124	0.00497236	0.00095689	0.00100385	0.00265333
rs1511036	18	T	0.7476	-0.0706	6.60E-05	0.25836878	0.82457001	0.53205225	0.00266621	0.00020419	0.00058853	0.00039513
rs1519812	8	A	0.635	-0.0549	0.0005162	0.58635256	0.72908076	0.4076836	0.01695553	0.00275521	0.00334388	0.00199214
rs1519813	8	C	0.6079	-0.0515	0.0008817	0.87588141	0.84809944	0.89450691	0.0614236	0.00630645	0.00613052	0.00642396
rs1520887	11	T	0.7595	0.0614	0.0006187	0.51755343	0.60653553	0.18885678	0.00883718	0.00289679	0.0033353	0.00117484
rs1523586	18	A	0.7476	-0.0707	6.53E-05	0.25215297	0.82733247	0.54328143	0.00264356	0.00019768	0.00058447	0.00039871
rs1523589	18	C	0.7744	-0.0624	0.000661	0.18956802	0.8475115	0.55354289	0.01247823	0.00125114	0.00475458	0.00326126
rs1528007	4	T	0.8976	-0.083	0.0008291	0.81265315	0.20418406	0.97019584	0.02243307	0.00559406	0.00163938	0.00653601
rs1537618	10	G	0.613	-0.0679	8.19E-05	0.39934947	0.37061493	0.26641638	0.00139022	0.00037058	0.00034618	0.00025606
rs1537832	6	C	0.543	-0.0548	0.0004505	0.69764273	0.54891271	0.29472273	0.01122791	0.00284908	0.00230098	0.00131802
rs1537833	6	G	0.5402	-0.0547	0.000393	0.70061272	0.52259273	0.27818045	0.00942398	0.00253245	0.00194918	0.0011065
rs1544454	7	G	0.7875	0.0657	0.0004472	0.12576919	0.98855323	0.79412061	0.0101274	0.00060664	0.00385672	0.00317594

rs1545474	19	A	0.6307	-0.0637	8.19E-05	0.04146022	0.66439515	0.19670763	0.00028598	4.62E-05	0.00058883	0.00019395
rs154674	5	T	0.8938	-0.0808	0.0009889	0.03119246	0.71695702	0.4359679	0.00323963	0.00035123	0.00585041	0.00377199
rs1552089	4	A	0.8575	0.0721	0.0008324	0.53495982	0.43957815	0.70075787	0.02286854	0.00388158	0.00326136	0.0049271
rs1552846	17	T	0.2304	0.0685	0.0002825	0.90998358	0.57142774	0.54583029	0.01561283	0.00238206	0.00157093	0.00150763
rs155320	18	G	0.4781	0.0519	0.0006957	0.16127187	0.28258768	0.73796841	0.00633063	0.00113266	0.00187442	0.00440216
rs1553664	18	G	0.5852	0.0513	0.0007614	0.39734172	0.5033219	NA	0.00737313	0.00275408	0.00339805	0.0007614
rs1555074	20	G	0.8627	-0.0833	0.0001555	0.24892912	0.13494865	0.48640801	0.0011516	0.00043197	0.00024702	0.00079339
rs1561451	2	A	0.2581	-0.0684	9.32E-05	0.65731111	0.50023022	0.0355756	0.00058886	0.00065533	0.00051145	4.51E-05
rs1561572	1	G	0.1692	0.0676	0.0008544	0.50833758	0.62329135	0.91315415	0.03442888	0.00379674	0.00454675	0.00636327
rs1570881	13	G	0.6445	-0.0548	0.0005957	0.10981551	0.3224764	0.20022634	0.00171395	0.00069569	0.00183599	0.00119681
rs1572597	10	A	0.5844	0.0513	0.000913	0.80687405	0.02876735	0.98010525	0.00579105	0.00605059	0.00030328	0.00717557
rs1576458	13	A	0.6075	0.0544	0.0005752	0.22966155	0.34653831	0.68878024	0.00790303	0.00131202	0.00189772	0.00349976
rs1578642	1	C	0.3821	-0.0563	0.0002973	0.02820305	0.8099705	0.3112845	0.00099633	0.0001064	0.00224707	0.00095208
rs1584832	2	A	0.6897	-0.0593	0.0002703	0.45514826	0.54265085	0.91413058	0.01282186	0.00123065	0.00144145	0.00229936
rs1596518	12	C	0.3031	0.0588	0.0003345	0.52903406	0.159226	0.2661955	0.00267247	0.00170584	0.00057737	0.00091949
rs1605085	3	T	0.5394	0.0523	0.0005772	0.95013654	0.11006742	0.32412736	0.00553718	0.00466621	0.00067749	0.00179302
rs1607267	2	C	0.8494	-0.0768	0.0003276	0.42262574	0.11518263	0.61464043	0.00328069	0.0013686	0.00042205	0.00191499
rs160862	7	C	0.4954	0.0532	0.0004927	0.05034757	0.26202274	0.38703004	0.00114261	0.00028786	0.00128517	0.00182392
rs1610062	19	G	0.3311	0.0578	0.000348	0.66555768	0.57303723	0.79899059	0.01906408	0.00217033	0.00189847	0.00255463
rs1616002	11	T	0.2789	-0.0604	0.0006139	0.01902715	0.42601811	0.86039908	0.00173213	0.00014435	0.0024189	0.00451401
rs1618603	18	T	0.6577	-0.0743	8.91E-06	0.92055739	0.44434057	0.77437009	0.00125098	0.00010429	5.32E-05	8.89E-05
rs162418	18	G	0.6607	-0.0693	3.30E-05	0.88431274	0.40705784	0.77053004	0.00311551	0.00033418	0.00016426	0.00029469
rs162419	18	A	0.6606	-0.0693	3.33E-05	0.89172333	0.40711705	0.7753723	0.00317346	0.00033962	0.00016569	0.00029892
rs1641215	7	C	0.6173	0.0524	0.0007459	0.05274244	0.77900045	0.34718355	0.00349264	0.00043838	0.00491031	0.0023977
rs1666568	15	G	0.2874	-0.0564	0.0007923	0.89257465	0.00720564	0.38166914	0.00093283	0.00583727	7.46E-05	0.00275295
rs1666995	2	C	0.9362	0.1082	0.00059	0.78187211	0.23287036	0.68928029	0.01474421	0.00400479	0.00135919	0.00358179
rs1676089	18	A	0.8843	-0.0801	0.0006327	0.70824911	0.48235527	0.09506459	0.00574448	0.00390324	0.00277554	0.0006447
rs16823382	2	G	0.9755	-0.1784	0.0003458	NA	0.81578973	NA	0.00258777	0.0003458	0.00258777	0.0003458
rs16835297	3	C	0.2006	0.0668	0.0004184	0.04410224	0.12794764	0.95925144	0.00105191	0.00021959	0.00058004	0.00354018
rs16839817	1	T	0.7129	-0.0607	0.0003336	0.87698781	0.23716246	0.92971117	0.01334736	0.0026731	0.00082635	0.0028157
rs16845084	3	T	0.8459	0.076	0.0002901	0.46419472	0.89716694	0.07758071	0.00317039	0.00133488	0.00240847	0.00026336
rs16845116	3	C	0.8492	0.0762	0.0003265	0.46888556	0.947462	0.14927033	0.00597397	0.00149792	0.00280919	0.00053265
rs16863147	3	G	0.9474	0.1124	0.0009853	0.79735603	0.53129402	0.82077191	0.04298615	0.00640215	0.00447841	0.00656676

rs16873319	5	A	0.9827	-0.2075	0.0003143	NA	0.26577198	NA	0.00086792	0.0003143	0.00086792	0.0003143
rs16903911	5	A	0.8568	0.0782	0.0003409	0.94481134	0.55465086	0.04304511	0.00272414	0.00291188	0.00181013	0.00017799
rs16916489	12	T	0.7744	-0.0644	0.0004314	0.38949737	0.92548917	0.34453908	0.01166481	0.00162843	0.0035238	0.0014587
rs16920485	12	G	0.7774	-0.0688	0.0001811	0.39220322	0.9685615	0.9832812	0.0138135	0.00074952	0.00169239	0.00171543
rs16920845	9	A	0.959	-0.1343	0.0004387	0.65824662	0.81670091	0.85213567	0.02985265	0.00264223	0.003201	0.003324
rs16929088	9	T	0.6042	0.0529	0.0007308	0.5725318	0.53013629	0.43115204	0.01771195	0.00367321	0.00343102	0.00285552
rs16932216	12	T	0.8029	-0.0687	0.0003501	0.83545196	0.89594892	0.36592479	0.0177461	0.00267252	0.00284411	0.00127631
rs1693310	18	T	0.6931	-0.0625	0.0002277	0.92520038	0.35875296	0.88205081	0.01366841	0.00199402	0.00085059	0.00191062
rs1693336	18	C	0.7359	-0.058	0.0008827	0.66609312	0.5342653	0.95827353	0.03938181	0.00496171	0.00408373	0.00683051
rs16935797	11	T	0.8509	-0.0793	0.0001697	0.43525927	0.09254339	0.52970767	0.00152	0.00077655	0.00018942	0.0009274
rs16943468	17	T	0.9327	-0.1229	4.95E-05	0.96924403	0.86567001	0.85418519	0.00861869	0.00052481	0.00047357	0.00046785
rs16943470	17	A	0.937	-0.1294	3.39E-05	0.96929455	0.86769222	0.85440814	0.00652696	0.00037227	0.00033651	0.00033181
rs16943481	17	T	0.9365	-0.1282	3.78E-05	0.96949091	0.87204737	0.85455211	0.0071008	0.00041077	0.00037297	0.00036614
rs16952683	13	G	0.7543	0.0593	0.0007058	0.36306289	0.80346542	0.89930472	0.02820379	0.00237527	0.00480605	0.0053078
rs16959046	17	A	0.904	-0.0852	0.000905	0.18684998	0.54908167	0.24870804	0.00626884	0.00163773	0.00427702	0.00211555
rs1697229	1	G	0.147	0.0846	8.01E-05	0.83674821	0.23031674	0.79661406	0.00390009	0.00071131	0.0002196	0.00068033
rs16987310	19	C	0.748	0.0647	0.0001998	0.17419153	0.69372757	0.17043953	0.00167949	0.00039209	0.00136997	0.00038438
rs17023216	2	G	0.8869	0.0862	0.0003601	0.5973546	0.75182273	0.96212523	0.02498312	0.00203155	0.00249462	0.00310697
rs17046574	3	A	0.9605	0.1305	0.0007608	0.15065608	0.86265101	0.38654784	0.00910911	0.00115466	0.00546629	0.00268548
rs17050859	4	T	0.2164	0.0621	0.0005913	0.97858207	0.97318453	0.55002521	0.0401516	0.00489227	0.00486847	0.00293714
rs1705465	18	C	0.5621	0.057	0.0001958	0.99110852	0.80160963	0.11005923	0.00500852	0.00185275	0.00153181	0.0002531
rs1705477	18	G	0.6927	-0.0639	0.0001566	0.94059101	0.34758336	0.88048952	0.01028253	0.0014469	0.00058887	0.00136355
rs17058855	13	A	0.7744	-0.0608	0.0008288	0.78781476	0.98859242	0.99102397	0.06505638	0.00544162	0.00664244	0.00665676
rs17058858	13	A	0.7744	-0.0608	0.0008287	0.79006084	0.99262748	0.99020552	0.06531017	0.0054547	0.00666549	0.00665123
rs17070999	5	C	0.6511	0.0628	8.65E-05	0.778001	0.77483282	0.08912334	0.00184643	0.00071393	0.0007113	9.85E-05
rs17071776	8	C	0.9373	-0.1059	0.0008238	0.54965307	0.60773815	0.81331618	0.03215618	0.00393942	0.00430543	0.00556659
rs17084754	4	C	0.8962	-0.0919	0.000176	0.07956257	0.89010818	0.2856107	0.00149998	0.0001705	0.00152922	0.00054782
rs17084794	4	C	0.8963	-0.0936	0.0001312	0.08780052	0.82487393	0.29548541	0.0012456	0.00014251	0.00109645	0.00043257
rs17088616	8	C	0.888	0.0815	0.000779	0.64265712	0.7202957	0.47337361	0.02665275	0.00430524	0.00476135	0.00328393
rs17095545	14	G	0.913	-0.0894	0.0008779	0.94525014	0.04413915	0.92829409	0.00835645	0.00671692	0.00043238	0.00661118
rs17106169	14	T	0.8079	-0.0675	0.0003874	0.53042899	0.26095502	0.33080547	0.00514404	0.00195011	0.0010311	0.00127671
rs17106195	14	C	0.8077	-0.0649	0.0005902	0.48555394	0.46155099	0.39207837	0.0113909	0.0026243	0.00250838	0.00216857
rs17145813	7	C	0.781	-0.0612	0.0008826	0.43893828	0.79348074	0.67705241	0.03058389	0.00343089	0.00578747	0.00503309

rs17153088	8	A	0.8725	-0.0763	0.0008739	0.79673	0.85167571	0.03126826	0.00531817	0.00575794	0.00610539	0.00031445
rs17158445	15	G	0.8914	-0.0812	0.0009569	0.8016176	0.97492882	0.46966939	0.04371446	0.0062692	0.00744201	0.0039134
rs17166013	7	G	0.8097	-0.0713	0.0002306	0.2990718	0.43405056	0.36615641	0.00357263	0.00072979	0.00102188	0.0008764
rs17175240	2	G	0.8876	0.0795	0.0006806	0.80641691	0.85287839	0.54777217	0.03530263	0.00466942	0.00490594	0.00331597
rs17180544	2	A	0.8407	0.0691	0.0009967	0.55431097	0.42092387	0.80965767	0.02853421	0.0046967	0.00368199	0.0065545
rs17180890	2	T	0.7067	-0.0577	0.0005303	0.62327779	0.00552258	0.10265936	0.00014165	0.00297962	4.02E-05	0.00058896
rs17200503	3	C	0.9536	-0.1404	0.0004302	0.27773567	0.12673003	0.03576202	0.00033584	0.00119868	0.00058973	0.00018588
rs17213633	4	G	0.8575	0.072	0.0008323	0.58233139	0.46058159	0.59844771	0.02244725	0.00418373	0.00339893	0.00428591
rs17228009	13	A	0.9212	-0.0939	0.0009839	0.84429323	0.19455855	0.05461026	0.00302786	0.00672306	0.00183023	0.00058199
rs17277553	9	C	0.8772	-0.0913	8.25E-05	0.81438737	0.80178022	0.03953058	0.00100244	0.00071303	0.00070303	4.45E-05
rs1728596	7	C	0.6049	0.0586	0.0002853	0.05516166	0.95409602	0.46144523	0.00251428	0.00018979	0.00250671	0.00130799
rs1729969	3	G	0.8101	-0.0637	0.0009973	0.72703448	0.93532185	0.36456705	0.03443272	0.00596679	0.00744122	0.00324298
rs17316057	10	A	0.825	0.0673	0.0008026	0.27135587	0.99685678	0.03669293	0.00279902	0.00205419	0.00650527	0.00033669
rs17362283	2	T	0.8421	0.0755	0.0002964	0.76318472	0.16725083	0.89267421	0.00831488	0.00212501	0.00054095	0.00244409
rs17363053	2	T	0.8426	0.0715	0.0006144	0.9434627	0.09643086	0.7963908	0.01018833	0.00489993	0.00063595	0.00421903
rs17379153	5	C	0.7975	0.0652	0.0004693	0.12119071	0.24850333	0.27907063	0.00162491	0.00061281	0.00117282	0.00130189
rs17397108	1	A	0.8163	-0.0964	9.61E-07	0.25688185	0.62574128	0.40105372	5.68E-05	4.00E-06	9.22E-06	6.08E-06
rs17435444	4	A	0.9372	-0.122	0.0002373	0.29065242	0.24226482	0.00656213	9.12E-05	0.00072985	0.00061881	2.24E-05
rs17447650	10	A	0.9513	-0.1212	0.0005535	0.45938211	0.0304999	0.46046211	0.00150362	0.00235888	0.0002024	0.00236382
rs17449954	4	T	0.9433	0.1088	0.0009246	0.44574127	0.73646634	0.53805249	0.02584251	0.00362436	0.00564636	0.00428132
rs17456275	4	C	0.5241	-0.0506	0.0006509	0.31047205	0.25751994	0.1071835	0.00212676	0.0019212	0.00162487	0.00073745
rs17457012	5	C	0.6624	-0.0575	0.0003398	0.73720833	0.30025455	0.5512276	0.00967062	0.00232769	0.00103968	0.00179492
rs17458210	1	T	0.8521	-0.0756	0.0004242	0.02984893	0.75962348	0.79409181	0.00270997	0.00015545	0.00291306	0.00303029
rs17466589	1	A	0.7307	-0.0621	0.0003254	0.65423663	0.68472614	0.65522899	0.01769585	0.00201281	0.00209646	0.00201554
rs17483979	4	A	0.7623	-0.0645	0.0002793	0.20687631	0.52518182	0.21773555	0.00242393	0.00062165	0.00144149	0.00065117
rs17485392	13	T	0.8305	0.0737	0.0002452	0.72380808	0.13411387	0.61412629	0.00444526	0.00171029	0.00037234	0.00147587
rs17491367	7	A	0.703	0.069	4.16E-05	0.32124479	0.64315958	0.31130003	0.00120003	0.00016345	0.00030866	0.0001588
rs17492088	12	G	0.7798	-0.0646	0.0004767	0.43728584	0.97307456	0.36711351	0.01480445	0.00197527	0.00402445	0.0016889
rs17492618	12	A	0.7629	-0.0641	0.0003851	0.66828556	0.57831731	0.37673329	0.01205704	0.00238442	0.00209562	0.00142733
rs17495854	2	C	0.7396	-0.0625	0.0006544	0.93990139	0.2249196	0.81979013	0.01999467	0.00516277	0.00144594	0.00457636
rs17500759	5	C	0.8901	-0.0855	0.0009078	0.99248281	0.24086027	0.10108376	0.00603267	0.00721865	0.00206147	0.00094483
rs17608302	10	C	0.7612	-0.0602	0.0005734	0.77209564	0.90460644	0.19955243	0.01557607	0.00386165	0.00444225	0.00115288
rs17621536	1	A	0.8717	-0.0762	0.0007824	0.4975173	0.43200594	0.08175226	0.00424352	0.00344542	0.00303946	0.00068167

rs17621621	1	G	0.8694	-0.0754	0.0007322	0.48897389	0.42109699	0.07536783	0.00367196	0.00319893	0.00280095	0.00059626
rs17633025	2	T	0.5583	0.0509	0.0009252	0.28082423	0.61857634	0.29877933	0.01076889	0.00240476	0.00484506	0.00254138
rs17634234	2	T	0.5488	0.054	0.0004953	0.13843133	0.48849712	0.03230335	0.00058545	0.00072595	0.00225664	0.00019269
rs17634670	2	G	0.497	0.0611	6.75E-05	0.28660219	0.31050912	0.06726389	0.00026497	0.00022927	0.00024672	6.04E-05
rs17637747	16	G	0.5544	-0.0532	0.000554	0.55073023	0.34743199	0.98605279	0.01886943	0.00277488	0.00183922	0.00465009
rs17643060	5	T	0.6496	0.063	8.01E-05	0.82514259	0.64428596	0.01508257	0.00038549	0.00070245	0.00056126	1.77E-05
rs17643126	5	C	0.6516	0.0616	0.0001175	0.74770092	0.59427569	0.08163912	0.00172609	0.0009084	0.00073804	0.00012043
rs17694135	6	A	0.5444	-0.0532	0.0005887	0.49934227	0.40400474	0.28202352	0.00826403	0.00268449	0.00222234	0.00161102
rs17711503	19	A	0.9256	-0.1109	0.0001338	0.26356379	0.40850391	0.75905432	0.00356617	0.00039682	0.00059109	0.0010354
rs1771752	6	A	0.2868	0.0627	0.0001409	0.82197515	0.87672869	0.7296785	0.01475078	0.00116552	0.00123519	0.00104689
rs17729322	7	G	0.9092	-0.0972	0.0002313	0.8241416	0.57970377	0.43973743	0.01086283	0.00182336	0.00132973	0.00103678
rs17741422	16	T	0.8052	0.0786	4.64E-05	0.42907035	0.4289784	0.87641034	0.00266996	0.0002356	0.00023555	0.00045215
rs17748074	18	A	0.5828	0.0607	9.90E-05	0.41510159	0.26542512	0.55399126	0.00226216	0.00045606	0.00030336	0.00059282
rs17748116	18	C	0.5747	0.0625	5.19E-05	0.54940568	0.08331432	0.554427	0.00068439	0.00032669	5.77E-05	0.00032941
rs17776911	19	T	0.8555	-0.0721	0.0008728	0.30871238	0.58282401	0.22324855	0.00854746	0.00248405	0.00436642	0.00185952
rs17785543	8	G	0.7566	-0.0614	0.0005248	0.58674898	0.78865522	0.60791128	0.0240799	0.00279771	0.00363803	0.00288731
rs17789761	20	C	0.8623	-0.083	0.0001619	0.24558623	0.1306752	0.48470727	0.0011436	0.00044264	0.00024887	0.00082027
rs17796758	7	A	0.9046	-0.1039	6.85E-05	0.89068155	0.99476186	0.51188092	0.00781506	0.00065292	0.00072169	0.00039466
rs17800283	15	G	0.9343	-0.1065	0.0005841	0.67270905	0.12633273	0.59801692	0.00755757	0.00347423	0.00077586	0.00312959
rs17833070	3	T	0.9211	-0.1031	0.0004958	0.75255893	0.95092579	NA	0.01436866	0.00331837	0.00408276	0.0004958
rs1813823	2	A	0.5602	-0.0517	0.0006718	0.84654925	0.31300046	0.37323664	0.01363509	0.0048182	0.00199068	0.00232965
rs1823024	5	G	0.3191	-0.0595	0.0003088	0.53736702	0.46238391	0.33433789	0.00678037	0.00161025	0.00140702	0.00105086
rs184434	18	A	0.8847	-0.0806	0.0005826	0.9870275	0.65466938	0.09395077	0.00860323	0.00486547	0.00338373	0.00059186
rs1853793	13	G	0.2938	-0.0586	0.00054	0.15527701	0.54924028	0.55582461	0.0067695	0.0008709	0.00270584	0.0027347
rs1860741	7	A	0.5655	-0.052	0.00065	0.13804216	0.024285	0.5404107	0.00062637	0.00092587	0.00019031	0.00314523
rs1863590	8	C	0.8288	-0.0701	0.0004282	0.09634649	0.09396952	0.44019169	0.00084116	0.00045776	0.00044747	0.00180507
rs1865229	16	C	0.4232	-0.0522	0.0006615	0.85153036	0.30068559	0.48044739	0.01577932	0.00477765	0.0018941	0.00287752
rs1866452	2	A	0.259	-0.069	7.97E-05	0.65882318	0.41360913	0.02846457	0.00037366	0.00056989	0.00037312	3.17E-05
rs1871738	4	G	0.8557	0.072	0.0007962	0.57646587	0.45512033	0.61977892	0.02195652	0.00398695	0.00323335	0.00425076
rs1880413	19	T	0.6769	-0.0555	0.0006292	0.91886105	0.38072386	0.19755944	0.01001496	0.00488863	0.00223663	0.00124215
rs1884777	14	G	0.9277	-0.0988	0.0008677	0.25003611	0.94612411	0.58394268	0.02079365	0.00204716	0.00665385	0.00435123
rs1890507	10	A	0.3479	-0.0546	0.0006902	0.94734753	0.65255465	0.51663251	0.03182109	0.00544836	0.00392085	0.00318745
rs1891318	1	T	0.5609	-0.0516	0.0006801	0.03187644	0.66918651	0.24813571	0.0015131	0.0002545	0.0039572	0.00163476

rs189518	15	C	0.2393	-0.0617	0.0005691	0.51069422	0.14460176	0.34149853	0.00438402	0.00265741	0.00085628	0.00185521
rs1904454	5	G	0.4979	-0.0507	0.0008028	0.73833112	0.70261482	0.1882872	0.01536499	0.00499719	0.00478342	0.00148091
rs1910884	3	C	0.5083	0.0511	0.000669	0.47466904	0.38009913	0.05954358	0.00258613	0.0028754	0.00235903	0.00044339
rs193139	1	T	0.871	-0.0793	0.0004432	0.47905928	0.16792955	0.1086405	0.00160215	0.00200799	0.0007819	0.00052681
rs1941741	11	T	0.8587	-0.0768	0.0005042	0.53446865	0.46529385	0.17091827	0.00592839	0.00248433	0.00219531	0.00089272
rs1949305	3	C	0.9132	-0.1022	0.0001454	0.33954104	0.84774235	0.48761487	0.00571508	0.00053892	0.00123277	0.00074829
rs1950377	14	A	0.0673	0.1094	0.0003456	0.35149416	0.65368166	0.63912548	0.01121282	0.00121668	0.00212253	0.00208024
rs1951215	14	T	0.9635	-0.135	0.0008289	0.51113078	0.0545645	0.28661436	0.00242919	0.00371418	0.00049768	0.00222014
rs1962503	18	A	0.87	0.0783	0.0004675	0.7458364	0.99047841	0.88377743	0.03975407	0.00312463	0.00401819	0.00363242
rs1969008	10	C	0.226	-0.0645	0.0008857	0.98144319	0.55354489	0.66289962	0.04095966	0.00699572	0.00422644	0.00495553
rs1974696	2	G	0.5433	-0.0502	0.0009548	0.01818121	0.67164269	0.03428336	0.00026269	0.00020764	0.00535603	0.00037078
rs1980034	18	C	0.7473	-0.0683	0.0001103	0.25549583	0.90055965	0.4906575	0.00393669	0.00032343	0.00101488	0.00058581
rs1985270	1	G	0.1003	0.1033	4.83E-05	0.02082278	0.49887685	0.42609326	0.00015768	1.49E-05	0.00028011	0.00024248
rs1992886	2	G	0.7738	-0.0628	0.0004505	0.75718103	0.19119685	0.74012387	0.01081001	0.0030643	0.00089232	0.00300286
rs1994465	7	G	0.831	-0.0669	0.0008487	0.18201297	0.66943311	0.88259141	0.01713078	0.00151006	0.00481399	0.00613978
rs1995232	3	G	0.6026	0.0574	0.0002098	0.820955	0.0340652	0.59130288	0.00147008	0.00166495	9.18E-05	0.00123991
rs1995235	3	C	0.5967	0.0588	0.0001396	0.82956177	0.02584599	0.63535414	0.00091642	0.00116543	4.88E-05	0.00091625
rs1997125	7	T	0.9524	0.1281	0.0005984	0.41040216	0.50216927	0.68810081	0.01626111	0.00228685	0.00273756	0.00362145
rs1997890	22	A	0.4354	-0.0525	0.0004305	0.00993366	0.89198481	0.96708935	0.00154228	5.71E-05	0.00340411	0.00365707
rs2001722	2	T	0.8746	0.0757	0.0009235	0.3531994	0.18908936	0.84444603	0.01142664	0.00294477	0.00168562	0.00636075
rs2006768	18	A	0.6082	0.0539	0.0007975	0.11938526	0.87182758	0.90134058	0.01485469	0.0009768	0.00575082	0.00592156
rs201010	6	T	0.3559	0.0535	0.0007047	0.99718571	0.71008195	0.53590249	0.0363308	0.00580483	0.00430345	0.00335412
rs201011	6	A	0.3558	0.054	0.0006632	0.98162751	0.73700378	0.55913112	0.03641087	0.0054275	0.00421505	0.00330019
rs201059	6	T	0.4645	-0.0557	0.0003139	0.09029504	0.51683115	0.96302942	0.00432733	0.00032513	0.00157796	0.00275213
rs2016327	4	A	0.9036	0.0863	0.0007422	0.14837001	0.05608575	0.69843068	0.00174222	0.00111375	0.00046151	0.00443979
rs2020887	1	C	0.6494	-0.0566	0.0003719	0.46280229	0.38449728	0.41375903	0.00711757	0.00166391	0.00140888	0.00150482
rs2037563	3	C	0.6853	-0.0534	0.0009876	0.27943987	0.31498332	0.89730733	0.01530666	0.00253764	0.00282317	0.00711478
rs2042925	5	C	0.8595	0.0791	0.0003017	0.9595794	0.54988732	0.0368828	0.00221283	0.0026482	0.00160992	0.00013805
rs2044732	13	A	0.7913	-0.0721	0.0001008	0.92753437	0.09523717	0.52067586	0.0018427	0.00096091	0.00012051	0.00056972
rs2054402	3	C	0.4261	0.054	0.0004412	0.45759786	0.83688747	0.35417104	0.01264057	0.00191955	0.0032877	0.00152572
rs2060984	8	T	0.5513	0.0571	0.0001576	0.43753526	0.73271163	0.52635791	0.00696469	0.00072969	0.00116243	0.00086249
rs2063359	3	G	0.2006	0.0668	0.0004175	0.04378158	0.12745031	0.95903637	0.00104072	0.0002177	0.00057687	0.00353273
rs2063360	3	T	0.1998	0.0681	0.0003264	0.04469666	0.08457617	0.94230686	0.00062005	0.00017704	0.0003174	0.00279482

rs2063361	3	A	0.1999	0.068	0.00033	0.04338065	0.12954409	0.95834492	0.00086865	0.00017399	0.00047282	0.00286493
rs206420	18	G	0.4908	-0.054	0.0004362	0.37005431	0.42925629	0.5129013	0.00863367	0.00157084	0.00179436	0.00210418
rs2071246	5	G	0.2358	-0.0683	0.000506	0.51761335	0.79353777	0.03425012	0.00256713	0.00242203	0.00354159	0.00020733
rs2073210	6	G	0.8183	-0.0677	0.0006879	0.75500361	0.66309597	0.80066464	0.03709972	0.00444729	0.00396512	0.00468391
rs2073211	6	A	0.828	-0.0676	0.0009038	0.47230742	0.79805669	0.81099493	0.03714914	0.00373898	0.00593939	0.0060239
rs2076378	20	C	0.8628	-0.0834	0.0001639	0.25029969	0.1409581	0.50312509	0.00128085	0.00045542	0.00026974	0.00085787
rs2076387	20	T	0.8632	-0.088	6.33E-05	0.14585089	0.15036985	0.40757024	0.00034782	0.00011621	0.00011952	0.00029824
rs2076388	20	C	0.863	-0.0875	7.19E-05	0.14585089	0.14938035	0.40741392	0.0003832	0.00013064	0.00013354	0.00033485
rs2076389	20	G	0.863	-0.0879	7.01E-05	0.14575445	0.15236295	0.4016917	0.00037734	0.0001277	0.00013301	0.00032336
rs2076390	20	C	0.8628	-0.0881	6.84E-05	0.14568883	0.15419169	0.39713538	0.00036967	0.00012468	0.00013136	0.00031263
rs2078183	5	C	0.4539	-0.0518	0.0008372	0.9521188	0.81324171	0.29067782	0.02854921	0.00648413	0.00564569	0.00226831
rs2101869	12	T	0.6786	0.0571	0.0005074	0.27702304	0.46919876	0.95526041	0.01312086	0.00138732	0.00222429	0.00418391
rs2111671	2	C	0.9756	-0.1792	0.0003263	NA	0.82837545	NA	0.00249107	0.0003263	0.00249107	0.0003263
rs2118788	5	G	0.5501	0.053	0.0005619	0.17508822	0.81752505	0.67749988	0.01180904	0.00100612	0.00398991	0.00337804
rs2126000	2	C	0.5072	-0.0579	0.000136	0.17840089	0.04599455	0.43988972	0.00031024	0.00028209	8.12E-05	0.00064157
rs2128867	4	C	0.0958	-0.097	0.000147	0.45129417	0.25025003	0.36049051	0.00224571	0.00070458	0.00041239	0.00057472
rs2131774	1	A	0.2595	-0.0612	0.0008107	0.83000896	0.26598078	0.6159365	0.01959626	0.00558762	0.00203597	0.00429543
rs2135137	4	G	0.8833	-0.0831	0.0005211	0.78227037	0.75269485	0.39949659	0.02112522	0.00358933	0.00346874	0.00197292
rs2138885	2	G	0.9208	-0.0962	0.0005726	0.38805378	0.08365827	0.99931413	0.00532557	0.00209133	0.00052436	0.00484431
rs2141597	3	A	0.5482	-0.0534	0.0005675	0.0306174	0.42933259	0.10112123	0.00043859	0.00020782	0.00227073	0.0006178
rs215974	6	G	0.1141	0.0941	0.0001801	0.94945568	0.8051748	0.42748872	0.01248949	0.0016542	0.00142673	0.00080623
rs2159944	12	T	0.7305	0.0567	0.0009562	0.98492808	0.61411659	0.82253533	0.05354443	0.00750391	0.00495619	0.0064084
rs2166503	2	G	0.4217	-0.0532	0.000547	0.95127098	0.2740844	0.09937699	0.00434258	0.00445468	0.00147006	0.00058816
rs216779	21	A	0.9331	0.1063	0.0004462	0.0381523	0.30726481	0.22337859	0.00062249	0.00020396	0.00135659	0.00101801
rs216782	21	T	0.9332	0.106	0.0004928	0.03950709	0.31050688	0.21835852	0.00068602	0.00023064	0.00149727	0.00109082
rs2186355	21	C	0.8584	0.0828	0.0001234	0.23318452	0.23123849	0.7610538	0.00197332	0.00032965	0.00032713	0.00096479
rs2194433	2	T	0.4666	0.0598	9.50E-05	0.34467242	0.65176478	0.2335072	0.00194812	0.00037071	0.00066157	0.00025978
rs2194435	2	T	0.5382	0.0539	0.0004661	0.15996532	0.3016429	0.09932748	0.00104062	0.00078317	0.00138763	0.00050836
rs2194442	2	C	0.5581	0.0521	0.0007002	0.28290944	0.62225663	0.2987342	0.00886271	0.00188719	0.00380742	0.00198137
rs220128	21	A	0.4437	-0.0649	2.25E-05	0.43106158	0.09417087	0.23354618	0.00015745	0.00012161	2.98E-05	6.91E-05
rs220136	21	A	0.4377	-0.0656	1.59E-05	0.44148941	0.18993852	0.15934097	0.00015714	9.04E-05	4.15E-05	3.52E-05
rs220139	21	C	0.438	-0.0563	0.0002725	0.08737276	0.23225193	0.05797304	0.00021959	0.00027727	0.00067515	0.00019045
rs220305	21	A	0.4784	-0.0516	0.0007465	0.49689049	0.20385796	0.52679615	0.00939055	0.00330108	0.00148991	0.00347677

rs220860	11	C	0.1777	-0.0667	0.0007362	0.70769833	0.87376214	0.24159446	0.01956411	0.00445969	0.00537058	0.00171361
rs220862	11	C	0.1646	-0.0795	0.0001014	0.52342668	0.58481908	0.17355269	0.00207018	0.00057554	0.00063647	0.00021026
rs2216817	2	A	0.4678	0.0598	9.37E-05	0.35195633	0.7205025	0.27508645	0.00240324	0.00037319	0.00071563	0.00029804
rs2219740	3	A	0.5771	-0.0566	0.0002389	0.52105275	0.85060575	0.29466607	0.00784152	0.00124372	0.00193075	0.00074348
rs2245046	19	G	0.9508	0.1443	3.60E-05	0.12024959	0.71685356	0.61083817	0.00091409	5.78E-05	0.00029845	0.00025783
rs2245409	6	A	0.8793	-0.077	0.0008962	0.55979662	0.5272008	0.52181041	0.02296752	0.00431329	0.00409048	0.00405347
rs2250509	1	A	0.1226	-0.0768	0.000849	0.23271719	0.56939227	0.87076639	0.01801798	0.00188279	0.0041741	0.00606937
rs225536	12	A	0.1951	-0.0725	0.0002341	0.42673364	0.32345577	0.71012551	0.00623914	0.0010201	0.0007942	0.00161288
rs2280694	19	A	0.9508	0.1423	4.67E-05	0.12005141	0.69096254	0.63136099	0.00111683	7.33E-05	0.00036568	0.00033679
rs2282492	11	T	0.6193	-0.053	0.0007425	0.12693989	0.05497313	0.07961449	0.00026949	0.00096793	0.00045334	0.00063465
rs2284610	21	G	0.9452	-0.1147	0.000623	0.67530176	0.67256234	0.91422476	0.03551645	0.00369115	0.00367788	0.00482456
rs2285803	6	T	0.2777	0.057	0.0007288	0.74704509	0.41209055	0.93180384	0.03067873	0.00463637	0.00273621	0.00563295
rs2289357	2	T	0.4345	0.0516	0.0009282	0.61284001	0.45545304	0.31195682	0.01570227	0.00481915	0.00370699	0.00264863
rs2290019	16	C	0.7947	0.0651	0.0006819	0.29234212	0.28560269	0.20314265	0.00372179	0.00189789	0.00185867	0.00136923
rs2303771	16	G	0.6543	0.0629	8.73E-05	0.47139139	0.19885751	0.05897627	0.00030604	0.00045677	0.00020767	6.79E-05
rs2314126	3	A	0.713	-0.0578	0.0006198	0.2793041	0.53773445	0.80669673	0.01489428	0.00167254	0.00300176	0.00430038
rs2320174	13	G	0.2637	-0.0673	8.07E-05	0.95260472	0.35386241	0.64396074	0.00509382	0.00080478	0.00032721	0.00056437
rs2339414	2	A	0.9282	-0.1054	0.0003638	0.34706993	0.0699186	0.1703607	0.00076097	0.00125975	0.00029454	0.00066246
rs2339516	2	G	0.9284	-0.1053	0.000359	0.36031619	0.06996757	0.16980287	0.00077412	0.00128745	0.00029117	0.00065259
rs2341876	19	A	0.951	0.1431	4.28E-05	0.15841079	0.74869801	0.58141222	0.00129459	8.74E-05	0.00036342	0.00028851
rs2341877	19	C	0.951	0.143	4.32E-05	0.12089462	0.75884837	0.59824289	0.00109098	6.88E-05	0.00037144	0.00029897
rs2351390	17	C	0.8953	0.0845	0.0006727	0.63427889	0.37629986	0.69572499	0.01978098	0.00373749	0.00234951	0.00405628
rs2357090	4	T	0.7824	-0.0596	0.0009448	0.50842568	0.49522367	0.37820259	0.01695602	0.00415078	0.00405531	0.00319337
rs2360783	4	T	0.9036	0.0863	0.0007422	0.16288831	0.05608575	0.69803963	0.00187252	0.00121145	0.00046151	0.00443759
rs2368432	10	T	0.2943	-0.0568	0.0007466	0.95271699	0.01272415	0.87659177	0.00279025	0.00586709	0.00011936	0.00545279
rs2374145	2	C	0.5207	0.0574	0.0001912	0.25424684	0.53871476	0.02841138	0.00043377	0.00053141	0.00104864	7.13E-05
rs2374313	7	C	0.5275	0.0554	0.0002583	0.78687105	0.49423013	0.09835904	0.00330073	0.00193108	0.00127227	0.00029422
rs2389137	13	C	0.6869	0.0551	0.0007361	0.86945719	0.08330092	0.17046148	0.00309636	0.00534664	0.00065607	0.00125268
rs2396215	2	T	0.6732	0.0562	0.0005081	0.68702979	0.8843659	0.76780535	0.03345073	0.00312783	0.00391278	0.00345221
rs2397132	6	G	0.0764	0.1046	0.0007573	0.16310282	0.40627501	0.16843171	0.00292911	0.00123507	0.00279565	0.00127132
rs2418977	10	T	0.8611	0.0785	0.0003125	0.17795754	0.6216866	0.04224686	0.00074349	0.00060045	0.00185461	0.00016153
rs2423760	20	C	0.3632	-0.0532	0.0006353	0.53333466	0.20580827	0.86031755	0.01266383	0.00304607	0.00129995	0.00465224
rs242542	20	A	0.8927	-0.0895	0.0005791	0.48013509	0.25942432	0.93585886	0.01379291	0.00255461	0.00147278	0.00461764

rs2427393	20	G	0.793	-0.0727	0.0001781	0.42134875	0.8693161	0.85046035	0.01196457	0.00078775	0.00151314	0.00148364
rs2447949	11	A	0.3302	0.0566	0.0004315	0.36447295	0.61954939	0.48366138	0.01062216	0.00153457	0.00246671	0.00197735
rs2454057	10	T	0.5284	-0.0547	0.0004426	0.76378253	0.00272071	0.95733928	0.00049651	0.00303985	1.76E-05	0.0037145
rs2503782	6	A	0.5256	0.051	0.0008975	0.32942388	0.63069431	0.09985082	0.00533485	0.00269827	0.00479829	0.00092484
rs2503784	6	T	0.5258	0.0512	0.00085	0.32917307	0.6381154	0.09982869	0.00516254	0.00256894	0.00462097	0.00088033
rs2505059	6	A	0.5258	0.0512	0.0008666	0.32867097	0.65649201	0.09981567	0.00534453	0.00261004	0.00481973	0.00089574
rs2513638	11	T	0.357	-0.059	0.0002044	0.30586141	0.76155018	0.4494651	0.00592184	0.0006677	0.00152047	0.00094582
rs2513645	11	A	0.356	-0.0578	0.0002816	0.28544051	0.83883655	0.44451774	0.00761159	0.00083826	0.0022088	0.00124998
rs2513649	11	T	0.3565	-0.0563	0.0005011	0.28134045	0.847152	0.44918158	0.01167548	0.00139103	0.00372063	0.00211558
rs2547369	19	T	0.9509	0.1292	0.0002341	0.11819816	0.70322592	0.65686283	0.00401544	0.00031807	0.00159881	0.00150389
rs2547370	19	C	0.9516	0.1339	0.0001329	0.12005141	0.69096254	0.64896885	0.00257709	0.00019219	0.00094543	0.00089338
rs2547372	19	G	0.9517	0.1357	0.0001161	0.12005141	0.69096254	0.64751526	0.00231817	0.00016978	0.00083676	0.00078903
rs2547380	19	A	0.9508	0.1444	3.51E-05	0.11961383	0.69066787	0.6265467	0.00088451	5.62E-05	0.0002821	0.00025805
rs2547385	19	G	0.9509	0.1435	4.12E-05	0.1198773	0.69354903	0.61645804	0.0009958	6.53E-05	0.00032769	0.00029426
rs2547390	19	A	0.9508	0.1445	3.47E-05	0.12008495	0.70403014	0.61564865	0.00087979	5.58E-05	0.00028387	0.0002511
rs2550730	16	C	0.5961	-0.0527	0.0008516	0.14724012	0.0315176	0.28055061	0.00059698	0.0012519	0.00030935	0.00223134
rs26189	5	A	0.1083	0.0869	0.0007907	0.9475943	0.23263054	0.1151985	0.00564595	0.00614127	0.001766	0.00093854
rs264193	18	C	0.4783	0.0519	0.0007012	0.15682977	0.39909796	0.73194199	0.00801271	0.00111237	0.00256935	0.0044009
rs264202	18	T	0.4759	0.0533	0.000442	0.12904193	0.43834771	0.68471275	0.00500814	0.00061439	0.0018501	0.00275495
rs264233	18	G	0.4781	0.0543	0.0003813	0.10695845	0.51492728	0.84144835	0.00512917	0.00045299	0.00187225	0.00290189
rs264234	18	T	0.4986	0.053	0.0005135	0.14445589	0.6384043	0.87337422	0.00965326	0.00077954	0.00295794	0.00390608
rs264246	18	A	0.4766	0.0517	0.0006729	0.12904193	0.43834771	0.68365107	0.00685282	0.00089885	0.00269263	0.00399499
rs2666805	18	A	0.6576	-0.0742	9.05E-06	0.92087895	0.43122841	0.77557756	0.00123848	0.0001058	5.25E-05	9.03E-05
rs267526	3	A	0.4022	-0.0548	0.0004355	0.21730952	0.93728643	0.33281416	0.00752662	0.0009715	0.0035936	0.0014261
rs2680308	5	T	0.9719	-0.1786	0.0002543	0.91756463	0.6143735	0.5410263	0.01524436	0.00218474	0.0015255	0.00136087
rs2680603	8	C	0.2087	-0.0676	0.0004976	0.24019615	0.71570242	0.13904485	0.00380188	0.00119904	0.00318391	0.00073192
rs2694539	19	G	0.9509	0.1291	0.0002398	0.11724879	0.70789579	0.67530815	0.0041716	0.00032275	0.00164341	0.00157539
rs2694555	19	T	0.9508	0.1401	6.13E-05	0.12005141	0.69101218	0.63996415	0.00139819	9.43E-05	0.00046882	0.00043719
rs2720751	8	C	0.4245	-0.0538	0.0004991	0.64067321	0.00374081	0.3103789	0.00024742	0.00289317	2.65E-05	0.00151388
rs27547	5	C	0.2809	0.0587	0.0005643	0.58582285	0.77943694	0.67283016	0.02694214	0.00298007	0.00383938	0.00337009
rs2760364	13	A	0.6269	-0.0518	0.0009712	0.17550858	0.88536165	0.46861557	0.01426401	0.00164949	0.00692941	0.00395724
rs2760365	13	T	0.6266	-0.0527	0.0008061	0.17494348	0.87405178	0.48862449	0.01269981	0.00139141	0.00581831	0.00348169
rs27723	5	G	0.2598	0.0595	0.0005603	0.36936284	0.74431053	0.60504832	0.01738898	0.00196255	0.00366256	0.00304751

rs2777625	13	T	0.3666	-0.0538	0.000541	0.3230514	0.55832422	0.70998437	0.01405372	0.00168689	0.00275017	0.00340491
rs2785836	13	G	0.3666	-0.0538	0.0005416	0.32295312	0.56384104	0.71153418	0.0141843	0.00168811	0.00277708	0.00341486
rs2793482	13	T	0.3513	0.0627	7.70E-05	0.37363912	0.27641525	0.44620428	0.00149545	0.0003294	0.0002501	0.00038728
rs2793483	13	G	0.3522	0.0637	5.87E-05	0.37531104	0.33728174	0.37940127	0.00124891	0.00025811	0.00023407	0.00026068
rs2798329	6	C	0.2469	0.059	0.0006547	0.87281237	0.88429805	0.93774161	0.0534045	0.00483851	0.00489461	0.0051544
rs2813672	1	A	0.097	0.0916	0.0002611	0.69491375	0.61244957	0.46643545	0.01138651	0.00174449	0.00155767	0.00121948
rs2813673	1	T	0.0973	0.0905	0.000302	0.69525839	0.60171355	0.49261427	0.0130055	0.00198809	0.00174686	0.00145989
rs2813675	1	C	0.0937	0.0917	0.0003261	0.69420267	0.56388561	0.58339328	0.01480524	0.00212645	0.0017655	0.00182011
rs281380	19	T	0.6345	0.0542	0.0005582	0.05337985	0.46777898	0.63043251	0.00301761	0.00034031	0.00241545	0.00315033
rs2815634	10	G	0.9093	0.0895	0.0006839	0.38626586	0.17322123	0.03965301	0.00088302	0.00244062	0.0011895	0.00031228
rs2824758	21	T	0.7336	-0.0632	0.0004075	0.03710002	0.68317524	0.38253055	0.00162705	0.00018292	0.00255746	0.0015224
rs2829444	21	G	0.7902	0.0708	0.0001834	0.35408766	0.79876663	0.38620341	0.00563619	0.00069109	0.00143982	0.00074762
rs2834143	21	A	0.8619	0.0792	0.000279	0.23033392	0.23306516	0.76508971	0.00369564	0.00068456	0.00069192	0.00201764
rs2834144	21	A	0.8632	0.0785	0.0003211	0.23278945	0.23301991	0.76514298	0.00414482	0.00078496	0.00078567	0.00228771
rs2834150	21	A	0.6957	0.0606	0.0002259	0.08013802	0.78172368	0.82519102	0.00374918	0.00021578	0.00170264	0.00178722
rs2834630	21	A	0.1071	-0.0919	0.000933	0.42207154	0.96983548	0.3601341	0.02291202	0.003481	0.00724585	0.0030235
rs2835930	21	C	0.7815	-0.0665	0.0002739	0.74841651	0.63344502	0.53735444	0.01412632	0.00194589	0.0016759	0.00144589
rs2835931	21	C	0.7815	-0.0665	0.0002739	0.74841651	0.63344502	0.53735444	0.01412632	0.00194589	0.0016759	0.00144589
rs2850247	11	C	0.7051	0.0565	0.0007181	0.70345018	0.71309668	0.54475666	0.02936366	0.00433955	0.00439209	0.00346059
rs28549095	3	A	0.4249	0.0551	0.0003402	0.42560133	0.83707643	0.30208782	0.00882536	0.00142476	0.00260961	0.00104651
rs2861667	5	C	0.347	-0.0553	0.0005426	0.18839077	0.3901884	0.85721279	0.00839065	0.00104146	0.00200289	0.00403411
rs2861857	2	A	0.4367	-0.0519	0.0006877	0.16670226	0.43303251	0.55505081	0.00715093	0.00115486	0.00271564	0.00338608
rs2869621	20	A	0.1546	-0.0743	0.0003777	0.00387838	0.78265697	0.80496559	0.00051555	2.11E-05	0.00269787	0.00276623
rs2875402	4	G	0.3088	-0.0555	0.0007291	0.66266726	0.01425994	0.00234588	1.85E-05	0.00417209	0.00012969	2.44E-05
rs2882155	2	T	0.6911	-0.0606	0.0002095	0.49647216	0.38368944	0.74202609	0.00754382	0.0010579	0.00083829	0.00151866
rs2886862	7	G	0.5259	-0.0518	0.0006391	0.07286869	0.82408961	0.96570626	0.00890499	0.00051109	0.00450251	0.00517838
rs2895436	6	A	0.8015	0.0665	0.0005884	0.31121767	0.12696274	0.63605359	0.00448437	0.00175894	0.00078455	0.00332733
rs2901486	18	G	0.7473	-0.0699	7.74E-05	0.25075504	0.83124201	0.54813726	0.00303294	0.00023004	0.00068545	0.00046967
rs2914267	5	G	0.7968	0.0635	0.0009472	0.08447964	0.26462084	0.30838562	0.00240204	0.00083486	0.00232889	0.00266935
rs2927258	18	C	0.9351	0.113	0.0002658	0.20633508	0.72108968	0.77703381	0.00775375	0.00059292	0.00183228	0.001959
rs2940273	4	C	0.7697	0.0651	0.0002383	0.48954935	0.74966383	0.12373461	0.00353793	0.00117316	0.00172037	0.00033707
rs2956173	8	A	0.6033	0.0515	0.0009421	0.69194811	0.40848845	0.55625895	0.02413649	0.00543388	0.00341069	0.0044827
rs2973628	5	T	0.205	-0.0638	0.0006291	0.1041468	0.25515226	0.28595102	0.00188702	0.00069667	0.00156297	0.00173113

rs2981423	18	T	0.9354	0.107	0.0005515	0.21171657	0.67622973	0.75337598	0.01258593	0.00117408	0.00331697	0.00365049
rs299699	1	G	0.7416	-0.0589	0.0006736	0.68046118	0.34723155	0.69042546	0.01955188	0.00398216	0.00218941	0.00403371
rs3094663	6	T	0.2778	0.0568	0.0007602	0.74704273	0.41209055	0.93182362	0.03158542	0.00481215	0.00284088	0.00584587
rs31731	5	A	0.5688	0.0556	0.0003052	0.09016286	0.7547454	0.32485352	0.0024633	0.00031647	0.00215973	0.00101316
rs317716	7	G	0.495	0.0528	0.000541	0.05108932	0.26202494	0.39511534	0.00126428	0.00031775	0.00139791	0.00202015
rs317726	7	T	0.4945	0.0508	0.0008661	0.05780123	0.2620001	0.43088197	0.00214843	0.00054578	0.00213097	0.00331891
rs323122	18	A	0.8848	-0.0791	0.0007404	0.98653122	0.6460617	0.09412805	0.01017205	0.00600549	0.00413537	0.00073675
rs330267	18	T	0.7099	-0.0718	2.50E-05	0.758063	0.42607582	0.99039789	0.00280394	0.00022469	0.00013242	0.00028695
rs330286	18	A	0.6955	-0.0593	0.0004366	0.98598398	0.35429794	0.83981732	0.0217913	0.00376697	0.00151192	0.00326737
rs330287	18	T	0.4425	-0.0627	4.29E-05	0.5561676	0.82667846	0.19061252	0.00156473	0.00027769	0.0003987	0.00010392
rs330299	18	T	0.6606	-0.0693	3.37E-05	0.89785861	0.4072372	0.77976564	0.00323256	0.0003453	0.00016747	0.00030359
rs330303	18	G	0.694	-0.0622	0.0002307	0.96863219	0.35767918	0.869108	0.01408106	0.00210196	0.00085838	0.00190772
rs330304	18	T	0.6939	-0.0621	0.0002385	0.95803986	0.32970319	0.89696056	0.01380279	0.00214418	0.00082178	0.00202157
rs330305	18	A	0.6934	-0.0617	0.0002638	0.92415925	0.35822794	0.88619747	0.0152211	0.00227196	0.00097023	0.00218844
rs330326	18	C	0.7372	-0.0583	0.0008528	0.66710244	0.5315523	0.94716972	0.03807342	0.00481965	0.0039433	0.00655992
rs336277	18	T	0.4383	0.0554	0.0003702	0.81296452	0.64575585	0.87781651	0.02664199	0.0027413	0.00223252	0.00293504
rs336279	18	A	0.5506	0.051	0.0008737	0.19297666	0.70259447	0.61451114	0.01456445	0.00163343	0.00515379	0.00457958
rs338479	1	C	0.7932	-0.064	0.0007843	0.4582255	0.72887315	0.21171394	0.01196107	0.00320972	0.00484019	0.0016112
rs346617	8	T	0.2049	-0.0614	0.0008983	0.43971811	0.90754154	0.44234856	0.02531625	0.00349046	0.00661328	0.00350897
rs35295960	2	T	0.6396	0.0576	0.0003233	0.47078239	0.22073234	0.21302154	0.00257775	0.00149012	0.00075272	0.00072887
rs358683	1	C	0.2037	0.0631	0.0008564	0.75601903	0.77067726	0.58490474	0.03856292	0.00540137	0.00549342	0.00430739
rs358684	1	A	0.2035	0.063	0.0008623	0.75627617	0.76879399	0.58593377	0.0387342	0.00543573	0.00551482	0.00434033
rs358685	1	C	0.1716	0.0751	0.000211	0.67344885	0.83511437	0.61907077	0.01466072	0.00140094	0.00169933	0.00129882
rs36496	19	C	0.1932	0.0791	3.20E-05	0.41537657	0.95125251	0.66862119	0.0029303	0.00016259	0.00034711	0.00025152
rs3732569	3	A	0.9126	-0.1009	0.0001693	0.35203702	0.81396652	0.55620152	0.00704026	0.00063938	0.00136284	0.00096712
rs3732593	3	G	0.8342	-0.0682	0.0009745	0.64218913	0.72284036	0.2440796	0.01961834	0.0052421	0.00581711	0.00222249
rs3733767	5	G	0.9702	-0.1626	0.0002712	0.34617821	0.59806443	0.4563143	0.00677415	0.00096451	0.00157762	0.00123718
rs3744311	17	C	0.6501	-0.0583	0.0009743	0.97416477	0.26638908	0.34492984	0.01658252	0.00755503	0.00240248	0.00302398
rs3744787	17	A	0.8632	0.0755	0.0005803	0.12921234	0.02085804	0.13098313	0.00015238	0.00078718	0.00014914	0.00079693
rs3752400	4	A	0.8945	-0.0891	0.0002511	0.08401398	0.98682728	0.28098316	0.0022064	0.00024822	0.00230519	0.000745
rs3761952	1	C	0.9512	-0.1248	0.0004324	0.37957253	0.81047849	0.74160471	0.01810823	0.00159447	0.00313874	0.00290049
rs3767225	1	T	0.5845	-0.0522	0.0007143	0.07058594	0.41923106	0.42717104	0.00308108	0.00054933	0.00272911	0.00277507
rs3789433	1	A	0.25	0.0588	0.0008155	0.88524229	0.5599659	0.42001477	0.02655371	0.00594396	0.00396903	0.00307557

rs3789638	1	G	0.9513	-0.1243	0.0004501	0.37700606	0.81058719	0.74276636	0.01856565	0.00164286	0.00325297	0.00301001
rs3800784	7	T	0.5441	0.0533	0.0006718	0.95120995	0.50066877	0.97791646	0.04042745	0.0053394	0.00302626	0.00547112
rs3813141	19	C	0.7481	0.0647	0.0001994	0.17471435	0.67924732	0.17106833	0.00165815	0.00039244	0.00134182	0.00038497
rs3813143	19	G	0.748	0.0647	0.0001999	0.17434036	0.68360592	0.1708778	0.00166545	0.00039257	0.0013526	0.00038546
rs3815362	11	C	0.6922	0.0559	0.0007205	0.96582456	0.66294966	0.29325223	0.02264721	0.00575513	0.0041301	0.00199927
rs3817422	2	G	0.2476	-0.0638	0.0002934	0.57191026	0.68640833	0.28414511	0.00812381	0.00162643	0.00191529	0.00086638
rs3822423	5	G	0.9702	-0.1626	0.0002713	0.34662348	0.59474504	0.45770948	0.00676982	0.00096595	0.00157029	0.001241
rs3848663	19	G	0.8555	-0.0721	0.000878	0.30905273	0.58432638	0.22341789	0.00861315	0.00249969	0.00439939	0.0018707
rs3911131	18	G	0.6602	-0.0547	0.0006188	0.12312401	0.54614865	0.65115626	0.00706206	0.00079864	0.00303911	0.00355258
rs3923106	3	A	0.5482	-0.0507	0.000911	0.03544631	0.42846795	0.12928285	0.00087309	0.00036621	0.00345388	0.00118327
rs400819	21	C	0.0833	0.0925	0.0007427	0.17450711	0.43881932	0.93005104	0.01155626	0.00128971	0.00294261	0.00571784
rs406338	8	G	0.9124	-0.0877	0.0009807	0.94707302	0.82767912	0.21294325	0.02588539	0.00741329	0.0065881	0.00197848
rs4074399	1	C	0.9258	-0.1184	4.77E-05	0.38709357	0.94667783	0.22536542	0.00162386	0.0002198	0.00049715	0.00013379
rs4092257	1	G	0.4182	-0.0541	0.0005613	0.10941067	0.24799017	0.46570879	0.00255994	0.00065698	0.00137521	0.00241783
rs41466649	8	G	0.829	-0.0703	0.000422	0.10023713	0.11109192	0.50520817	0.00109171	0.00046829	0.00051418	0.00201542
rs41508146	4	T	0.6346	-0.0589	0.0001891	0.38821324	0.81370259	0.54155515	0.00805437	0.00077224	0.00150477	0.00104318
rs4234206	3	T	0.234	0.0652	0.0003033	0.48943186	0.91200913	0.16335617	0.00606956	0.00145703	0.00254287	0.00054068
rs4237360	10	T	0.7858	0.0639	0.0006898	0.22942332	0.85219198	0.69012792	0.01737211	0.0015432	0.00496083	0.00411783
rs4264950	5	T	0.9827	-0.2075	0.0003143	NA	0.26577198	NA	0.00086792	0.0003143	0.00086792	0.0003143
rs4267192	13	G	0.634	0.0552	0.0003921	0.32611022	0.57065568	0.71086264	0.01139266	0.00127414	0.0021044	0.0025602
rs4296033	11	T	0.1209	0.0829	0.0003516	0.00057289	0.93061022	0.6789889	0.00010309	3.31E-06	0.00295298	0.0022298
rs4298423	7	T	0.3332	-0.078	1.43E-06	0.61295344	0.62729755	0.6417708	0.00023728	1.31E-05	1.34E-05	1.37E-05
rs4322543	13	A	0.7343	0.0705	3.25E-05	0.97122964	0.3943668	0.64606638	0.00281686	0.00035828	0.00015702	0.00024688
rs4330312	4	T	0.4686	0.0501	0.0009673	0.42702738	0.22956447	0.97515709	0.0172914	0.00363162	0.00209013	0.00751423
rs4344834	18	T	0.4446	-0.0635	3.37E-05	0.5561676	0.82356918	0.18990328	0.00128872	0.00022281	0.00031904	8.30E-05
rs4346965	8	A	0.8194	-0.0676	0.0006799	0.43570177	0.85958689	0.77236887	0.02940958	0.00270294	0.00493546	0.00449087
rs4349303	2	G	0.0873	-0.0942	0.0004474	0.53257106	0.71487669	0.77875312	0.02233547	0.00222596	0.00289378	0.00312253
rs4350702	2	G	0.1017	-0.0903	0.0004102	0.8880274	0.92011289	0.38294904	0.02182307	0.00324841	0.00335238	0.00153296
rs4351607	1	A	0.9215	-0.1064	0.0001772	0.38433853	0.94503218	0.22378602	0.00439584	0.00072153	0.00162348	0.00044157
rs4359402	15	G	0.939	-0.1338	0.0001168	0.07698805	0.24785154	0.07980608	0.00013572	0.00011347	0.00033147	0.00011729
rs4363773	14	T	0.0674	0.1113	0.0002719	0.33744823	0.65283568	0.63239852	0.00904933	0.00094472	0.00171054	0.00166246
rs4365462	2	A	0.0294	-0.162	0.0003114	0.75799924	NA	0.75034794	0.00831589	0.00220734	0.0003114	0.00218743
rs4372953	2	T	0.5195	0.0579	0.0001752	0.26506207	0.70095601	0.0768544	0.00113765	0.00050978	0.00122868	0.00016448

rs437302	20	G	0.9007	-0.0875	0.0005995	0.22124303	0.06907301	0.67675096	0.00230786	0.00131679	0.00045931	0.00357427
rs4384177	1	G	0.1466	0.085	7.49E-05	0.79272167	0.23031222	0.7604231	0.00343207	0.00063719	0.00020645	0.0006136
rs4385081	4	T	0.8564	0.0715	0.0008765	0.55749418	0.37555552	0.54565378	0.018302	0.004214	0.0029688	0.00413477
rs4418307	7	C	0.656	0.0622	0.0004658	0.18307227	0.58992746	0.95060671	0.01073645	0.00088427	0.00252792	0.00386222
rs4439630	13	G	0.362	0.0558	0.0004586	0.178152	0.20807011	0.81538685	0.00427004	0.0008507	0.00097875	0.00332483
rs4442821	16	G	0.4757	0.0572	0.0001473	0.56720821	0.41489454	0.19196124	0.00243719	0.00086809	0.00065409	0.00032442
rs4448804	13	G	0.7744	-0.0608	0.0008317	0.77150239	0.95169866	0.99462865	0.06289148	0.00535878	0.00644426	0.00669845
rs4456645	2	C	0.4555	-0.0529	0.000473	0.21812519	0.18920645	0.73087287	0.00436445	0.00105021	0.0009237	0.00310093
rs4463087	4	A	0.7824	-0.0596	0.0009624	0.50842568	0.47537866	0.35835964	0.01605413	0.00421907	0.00397559	0.00309441
rs4493295	2	T	0.9137	-0.1069	0.0001044	0.52491494	0.23929438	0.80073212	0.00345769	0.0005925	0.00028973	0.00086853
rs4507317	4	G	0.4804	0.0514	0.0007107	0.40829101	0.40543357	0.94267963	0.01968001	0.00265364	0.00263709	0.00556624
rs454768	18	A	0.6035	0.0534	0.0008965	0.15059623	0.93172277	0.91309763	0.02017532	0.00133797	0.0067556	0.00663708
rs4581598	13	C	0.6334	0.0538	0.0005428	0.32254957	0.57983218	0.71402656	0.01451984	0.00168957	0.00285267	0.0034322
rs4583203	15	T	0.3856	0.0528	0.0006738	0.37153941	0.30156455	0.0970228	0.00262416	0.00232636	0.00193062	0.00069528
rs4603206	10	C	0.7858	0.0634	0.000806	0.38495567	0.8966467	0.75197315	0.03069323	0.00281669	0.00594962	0.0050963
rs4609889	17	C	0.6682	0.0567	0.0004491	0.13942294	0.72937996	0.4646369	0.00588464	0.00066863	0.00295589	0.00197708
rs4619812	3	A	0.6853	-0.0534	0.0009875	0.28794764	0.30945059	0.90073099	0.0154834	0.00260614	0.00277875	0.00713791
rs4640402	2	A	0.5891	-0.0534	0.0005079	0.51480434	0.48757786	0.25674616	0.00812461	0.00241838	0.00230393	0.00129683
rs465305	5	A	0.0861	0.0953	0.000379	0.45109118	0.01237561	0.66321759	0.00072018	0.00165391	6.22E-05	0.00233478
rs4655148	1	A	0.5848	-0.0512	0.0008794	0.07097087	0.42225487	0.43116183	0.00367195	0.00066667	0.00330426	0.00336604
rs4659536	1	T	0.6757	-0.0545	0.000851	0.26735832	0.77122731	0.42110628	0.01472221	0.00213604	0.00546636	0.00320159
rs4662295	2	C	0.4547	-0.0516	0.000623	0.23675451	0.17585371	0.66786262	0.00505302	0.00144868	0.00110861	0.0036551
rs4662299	2	G	0.5178	-0.0625	3.88E-05	0.35808691	0.15547888	0.85027952	0.00089194	0.00016936	7.86E-05	0.00037361
rs466712	5	A	0.0713	0.1025	0.000462	0.3662898	0.01191178	0.67197749	0.00070025	0.00163883	7.21E-05	0.00281814
rs4668780	2	C	0.6908	-0.0596	0.0002603	0.44146049	0.45916607	0.99969819	0.01153274	0.00115732	0.00119904	0.00240808
rs4677758	3	T	0.2251	0.0691	0.000209	0.45243638	0.80998666	0.11174657	0.00295738	0.00097077	0.00163936	0.00027243
rs4696604	4	T	0.884	-0.0837	0.0004824	0.78269488	0.73404505	0.40256028	0.01976419	0.0033535	0.00316778	0.00185391
rs4697528	4	G	0.3094	-0.0566	0.0005769	0.62367744	0.03275082	0.00406321	4.59E-05	0.003213	0.0002244	3.27E-05
rs4698412	4	G	0.4608	0.0567	0.0001923	0.3477674	0.3971745	0.59374952	0.00470775	0.00070973	0.00080041	0.00115066
rs4698414	4	A	0.1948	0.0907	2.28E-06	0.75699117	0.63841814	0.15367691	0.00013026	2.46E-05	2.10E-05	5.55E-06
rs4698415	4	T	0.2087	0.0776	3.92E-05	0.62827291	0.3744599	0.61545045	0.00215644	0.00028611	0.00017812	0.00028077
rs4701028	5	T	0.6454	0.0556	0.0004757	0.73586626	0.88985664	0.59218545	0.02813046	0.00313556	0.00371129	0.00258453
rs4717344	7	C	0.8597	-0.0767	0.0006614	0.48377425	0.06408188	0.93200659	0.00544016	0.00289485	0.00046914	0.00517281

rs4726988	7	T	0.5146	-0.0518	0.0005039	0.3676671	0.35936822	0.59649597	0.00936968	0.0017774	0.00174142	0.00273818
rs4727353	7	A	0.9355	0.1039	0.0007887	0.50683758	0.42263256	0.3637211	0.01288589	0.00352761	0.0030021	0.00262669
rs4731366	7	C	0.26	0.0587	0.0008021	0.57510141	0.36520882	0.42168311	0.01431042	0.00400467	0.00267612	0.00304131
rs4737532	8	G	0.1272	0.0856	0.000166	0.54750985	0.71507736	0.45702014	0.00756073	0.00093667	0.00119164	0.00079557
rs4743638	9	C	0.3464	-0.0604	0.0001562	0.35490222	0.78368522	0.44471798	0.00548507	0.00059872	0.00122511	0.00073457
rs4746839	10	G	0.0714	0.1068	0.0003087	0.2536425	0.42541068	0.16925637	0.0021444	0.00081862	0.00130508	0.0005674
rs4746841	10	T	0.0714	0.1067	0.0003087	0.25159689	0.41900848	0.17123435	0.00212517	0.00081265	0.0012874	0.00057342
rs4748856	10	A	0.7858	0.0633	0.0008197	0.38824696	0.89965437	0.74135421	0.03100201	0.00288098	0.00605615	0.00510813
rs4755320	11	C	0.8451	-0.0693	0.0009665	0.6377867	0.8669261	0.9357705	0.0553432	0.00517275	0.00677398	0.00724281
rs4758298	11	T	0.9364	-0.103	0.0008834	0.10778233	0.73595859	0.27813337	0.00552117	0.00097685	0.00542112	0.00228784
rs4765234	12	T	0.9556	0.1272	0.0006149	0.77499971	0.31759232	0.49272053	0.01481966	0.00412163	0.00186325	0.00275763
rs4767439	12	G	0.7574	0.0654	0.0001968	0.41376902	0.38422867	0.83095068	0.00684828	0.00084815	0.0007932	0.00158928
rs4767440	12	A	0.7563	0.0671	0.0001309	0.34291345	0.37486507	0.82142687	0.00426089	0.00049427	0.00053595	0.00109006
rs4768953	12	A	0.964	0.1522	0.0002269	0.08893992	0.4490498	0.0057439	4.92E-05	0.00023835	0.00103842	1.90E-05
rs4779952	15	C	0.5953	0.0534	0.0005403	0.74911047	0.30480468	0.05381105	0.00243277	0.00356671	0.00159934	0.00033277
rs4782685	16	A	0.0694	-0.1006	0.0008002	0.82345894	0.19184357	0.69998655	0.01675571	0.00548554	0.00150162	0.00475401
rs4796911	18	G	0.4955	0.053	0.0006316	0.19527889	0.27282738	0.70981206	0.00642886	0.00123345	0.00166565	0.00390485
rs4823954	22	G	0.9327	-0.1079	0.000422	0.50627489	0.53973676	0.57577836	0.01362861	0.00201923	0.00213811	0.00226518
rs4833651	4	A	0.2165	0.0596	0.0008986	0.98233121	0.98972767	0.59822602	0.05698094	0.00709047	0.00713719	0.00458461
rs4840341	8	G	0.6937	0.0566	0.0005912	0.22888451	0.74699706	0.75291738	0.01503835	0.0013407	0.0038532	0.00388022
rs4853951	2	G	0.0895	-0.0948	0.0007042	0.92362562	0.49800532	0.96104303	0.04028887	0.00542311	0.00314068	0.00561593
rs485446	18	G	0.9357	0.1093	0.000447	0.20731927	0.67069359	0.75196284	0.01055805	0.00095326	0.0027319	0.00302448
rs4857674	3	C	0.5484	-0.0513	0.0007866	0.0350609	0.43330874	0.1301419	0.00078147	0.00031711	0.00306215	0.00104283
rs4858302	3	A	0.7319	0.0675	9.95E-05	0.59362107	0.5723432	0.49202518	0.00489992	0.00063406	0.00061341	0.00053473
rs4876153	8	A	0.6866	0.0571	0.0005073	0.24094074	0.63077444	0.17739561	0.00422701	0.00122347	0.00289504	0.00092835
rs4886014	13	A	0.8198	0.0678	0.0004806	0.12995947	0.16234549	0.48434236	0.00192698	0.00066712	0.00081601	0.00218004
rs4886543	15	G	0.7734	-0.0607	0.0009432	0.1509653	0.57981669	0.79983627	0.0135751	0.00140353	0.00465467	0.00617827
rs4902438	14	A	0.5816	-0.0604	0.0002616	0.54303549	0.94842571	0.03788883	0.00198566	0.00140059	0.00230781	0.00012411
rs4910363	11	A	0.2574	0.061	0.0004639	0.89420044	0.59837635	0.33728081	0.01610413	0.0036453	0.00255085	0.00152751
rs4913455	12	T	0.813	-0.0636	0.0009491	0.26035482	0.77090148	0.98616657	0.02848881	0.00229947	0.00601441	0.00746336
rs4921518	5	A	0.6094	0.0601	0.0001269	0.54417217	0.19798754	0.85621832	0.00375613	0.00073065	0.00029124	0.00110038
rs4932425	15	G	0.8894	-0.0981	9.29E-05	0.0469314	0.50084225	0.32872607	0.00042151	5.82E-05	0.00051077	0.0003481
rs4932427	15	T	0.8727	-0.1	1.72E-05	0.00947763	0.90883707	0.37020763	5.13E-05	2.70E-06	0.00018822	8.24E-05

rs4932428	15	G	0.8804	-0.1023	1.71E-05	0.00934895	0.91841559	0.3699854	5.10E-05	2.67E-06	0.00018973	8.22E-05
rs4937609	11	C	0.6445	0.0726	4.73E-06	0.52304969	0.11427524	0.62137516	0.00013426	3.44E-05	8.33E-06	4.03E-05
rs4937612	11	G	0.4473	0.061	0.0006256	NA	0.22127375	NA	0.00136839	0.0006256	0.00136839	0.0006256
rs4941417	13	C	0.8411	-0.0721	0.0004588	0.64977294	0.15027838	0.87052492	0.00924543	0.00271823	0.00072962	0.0035249
rs4942097	13	A	0.8398	-0.0746	0.0002871	0.59148557	0.14793855	0.84084346	0.00586468	0.00164395	0.00047004	0.00225209
rs4942101	13	C	0.8391	-0.0745	0.0002857	0.53346527	0.17748851	0.3548715	0.00322887	0.00149194	0.00055219	0.0010338
rs4959307	6	G	0.8176	0.0665	0.0007444	0.30047954	0.45358517	0.2642709	0.00700713	0.00210375	0.00303665	0.0018755
rs496809	18	C	0.9299	0.1106	0.0001959	0.20884206	0.88416457	0.71620883	0.00683042	0.00045429	0.00167336	0.00138505
rs497785	18	G	0.9352	0.1084	0.0004682	0.20708992	0.67584483	0.75292258	0.01098425	0.00099298	0.00286636	0.00315518
rs4981264	14	C	0.6272	0.0538	0.0005293	0.15704564	0.42908199	0.35144285	0.00395651	0.00086409	0.00213261	0.00178386
rs501332	1	A	0.2697	0.0619	0.000339	0.65196076	0.69465964	0.75247044	0.02025823	0.00208136	0.00220273	0.00236566
rs504583	1	T	0.6178	0.0563	0.0002979	0.02943336	0.74796664	0.29151324	0.00092028	0.00011087	0.00209654	0.00089894
rs520354	2	A	0.5149	-0.0542	0.0004304	0.55401956	0.55387375	0.71150214	0.01749123	0.00222745	0.00222692	0.00278399
rs521973	5	G	0.7606	0.065	0.0002979	0.13705237	0.37040609	0.82787792	0.00395291	0.00045344	0.00111579	0.0022955
rs532010	6	A	0.6169	-0.0549	0.0003542	0.838474	0.1281883	0.03641768	0.00071332	0.00270907	0.00049944	0.00015812
rs540364	15	C	0.8918	-0.0898	0.0002181	0.19913695	0.20615182	0.92448407	0.00288253	0.00047967	0.00049501	0.00191731
rs543027	8	A	0.9046	-0.0861	0.0008389	0.03450201	0.53550613	0.03944188	0.00037035	0.00033141	0.00391193	0.00037443
rs545602	13	T	0.1899	0.0691	0.0003539	0.3536466	0.25642921	0.31075772	0.00332443	0.0012498	0.0009354	0.00111245
rs559606	8	C	0.0895	0.0906	0.000623	0.28604095	0.83245767	0.067753	0.00334416	0.00171656	0.00444165	0.00046739
rs563634	15	G	0.1879	0.0691	0.0005296	0.41377425	0.20481047	0.17345154	0.00274992	0.00206553	0.00109867	0.00094572
rs563765	13	C	0.2646	-0.0661	9.81E-05	0.94269149	0.3123826	0.63984641	0.00530576	0.00095146	0.00034914	0.00067012
rs568998	15	C	0.3867	0.0519	0.0007828	0.36949186	0.30043586	0.09539936	0.00288589	0.00264603	0.00220016	0.0007843
rs570900	15	A	0.3865	0.0527	0.0006479	0.35925647	0.30021533	0.09538418	0.00244033	0.00217993	0.0018566	0.00066074
rs570956	15	T	0.8922	-0.0888	0.0002443	0.20682616	0.20499597	0.91524081	0.00319805	0.0005504	0.00054597	0.00210305
rs571877	17	A	0.7484	0.0611	0.0004493	0.75615791	0.69572397	0.46071132	0.01942681	0.00305337	0.00283537	0.00196292
rs574342	19	G	0.8666	-0.0762	0.0005993	0.57322474	0.54398305	0.62684021	0.02045832	0.00308363	0.0029434	0.00333847
rs577241	13	T	0.2646	-0.0661	9.81E-05	0.93803974	0.31236199	0.64191419	0.00529702	0.00094688	0.00034899	0.00067184
rs577774	5	G	0.0868	0.0976	0.0002597	0.2475703	0.09832669	0.90234562	0.00216398	0.00068486	0.00029558	0.00219312
rs590273	18	G	0.6581	0.0575	0.0002643	0.95770985	0.42795179	0.50700365	0.01187671	0.00234939	0.00114094	0.00132898
rs5996780	22	G	0.8982	0.1077	1.68E-05	0.64229648	0.77111452	0.34640325	0.00127268	0.00013435	0.00015892	7.61E-05
rs6043648	20	C	0.4899	-0.0548	0.0002723	0.39628035	0.10171796	0.91740248	0.00334887	0.00109356	0.00031836	0.00232193
rs606568	13	T	0.8263	-0.0699	0.0005102	0.97382053	0.22548906	0.56850472	0.01322482	0.00427645	0.00115852	0.00265265
rs606590	18	C	0.6032	0.053	0.000973	0.14974508	0.92059095	0.90612825	0.02099881	0.00143283	0.00718188	0.00708302

rs6069957	20	G	0.9223	-0.0953	0.0006254	0.0678322	0.057578	0.49444458	0.00063912	0.00046952	0.00040445	0.00280821
rs6071459	20	C	0.6794	0.066	4.53E-05	0.49865138	0.89571432	0.74797043	0.0045642	0.0002643	0.00045098	0.0003827
rs6072001	20	G	0.6833	0.0649	6.76E-05	0.5070496	0.94251059	0.75438756	0.00652839	0.00038683	0.00067953	0.00055526
rs6077681	20	T	0.9016	-0.0868	0.0008619	0.47776892	0.6669724	0.8942555	0.03427678	0.00362168	0.00486414	0.00629566
rs6090338	20	A	0.7435	-0.0573	0.0009174	0.38402347	0.80606513	NA	0.01207291	0.00315347	0.00607084	0.0009174
rs6095640	20	G	0.9744	0.1669	0.0009443	NA	NA	0.81654137	0.00629782	0.0009443	0.0009443	0.00629782
rs610232	18	T	0.0765	0.0996	0.0004026	0.68900117	0.61151242	0.66548444	0.01992891	0.00254925	0.00229192	0.00247155
rs6131753	20	T	0.7148	-0.0633	0.0006389	0.06963096	0.23849576	0.85552529	0.00309357	0.00049026	0.00149162	0.00465251
rs6135624	20	G	0.7401	-0.0624	0.0009826	0.1119337	0.57527837	0.5220283	0.00817931	0.00111253	0.00479247	0.00439868
rs6135626	20	G	0.8132	-0.0742	0.0001446	0.00626765	0.39342434	0.65372775	0.00016935	1.35E-05	0.00061295	0.00097049
rs616104	8	C	0.0891	0.0904	0.0006627	0.34104969	0.83723022	0.07436546	0.0043191	0.00212338	0.00471433	0.00053806
rs617363	1	T	0.6179	0.0563	0.0002925	0.02953663	0.73695162	0.29096409	0.00089763	0.00010937	0.00203536	0.0008827
rs619508	13	T	0.8243	-0.0691	0.0005606	0.74883675	0.11211098	0.57812729	0.00708414	0.00368404	0.0006709	0.00292805
rs621222	1	T	0.7305	-0.0774	2.85E-05	0.69276162	0.38975459	0.46861455	0.00151432	0.00023347	0.00013774	0.00016315
rs636234	6	C	0.4323	-0.0603	8.06E-05	0.05756305	0.3657868	0.27867638	0.000301	6.16E-05	0.000337	0.00026285
rs637033	5	G	0.5058	0.0593	0.0001124	0.16748578	0.30631337	0.7347473	0.00171806	0.00022365	0.00038825	0.00085903
rs6430331	2	G	0.9197	-0.0935	0.0009488	0.77579536	0.73285333	0.44459734	0.03372146	0.00604625	0.00575117	0.00369986
rs6434799	2	C	0.263	-0.0703	4.97E-05	0.65850707	0.58840231	0.13247907	0.00115565	0.00037085	0.00033467	8.52E-05
rs6434802	2	C	0.2659	-0.069	6.81E-05	0.69554224	0.48734536	0.04711858	0.00058819	0.0005193	0.00037567	4.38E-05
rs6440716	3	G	0.9306	0.1253	9.61E-05	0.69303113	0.23202414	0.53958359	0.00289804	0.00070688	0.00026105	0.00056334
rs6454976	6	G	0.4476	-0.0534	0.0005084	0.63386992	0.4718851	0.09198293	0.00429955	0.00291328	0.00223959	0.00051302
rs6461718	7	G	0.2449	-0.0598	0.0006568	0.6443347	0.29000636	0.89927874	0.01961283	0.00371047	0.00182209	0.00498168
rs6475895	9	A	0.9183	0.0967	0.0004312	0.27599906	0.2064587	0.9086423	0.0061127	0.00119443	0.00091932	0.00346543
rs6496210	15	T	0.5487	-0.0629	9.83E-05	0.9657616	0.07586899	0.86553152	0.00231725	0.00097407	9.55E-05	0.0008823
rs6502440	17	G	0.6764	0.0554	0.0006848	0.14978768	0.76932016	0.46698932	0.00886767	0.00104471	0.00450368	0.00289345
rs6512238	19	C	0.3729	0.0589	0.0001445	0.24546367	0.11557414	0.41081616	0.00083238	0.00039892	0.00020041	0.00063707
rs6543288	2	G	0.5895	-0.0534	0.0005319	0.52975588	0.51678514	0.24314297	0.00860988	0.00258513	0.00252865	0.00128722
rs6544389	2	T	0.5101	0.0605	8.47E-05	0.25937618	0.58084468	0.02740711	0.00023568	0.00025758	0.00053716	3.24E-05
rs6548690	3	C	0.1278	-0.0841	0.0003419	0.33705332	0.6989847	0.77707953	0.01305943	0.00116028	0.00223189	0.00245311
rs6548843	3	T	0.4246	0.055	0.0003522	0.42362428	0.83593855	0.30152809	0.0090013	0.00146369	0.00268818	0.00107793
rs6548846	3	C	0.3581	0.0569	0.0003736	0.22738829	0.76682103	0.58768698	0.00912023	0.00088125	0.00262357	0.00206911
rs6563655	13	C	0.7744	-0.0608	0.0008288	0.77987772	0.96983232	0.99605728	0.06403655	0.00539335	0.00653179	0.00668638
rs6563658	13	G	0.7744	-0.0608	0.0008287	0.79851909	0.99958547	0.90057256	0.06209655	0.00550605	0.00670643	0.00611998

rs658853	9	G	0.6845	0.0532	0.000989	0.32891887	0.83938013	0.35791872	0.0179878	0.00293771	0.00671913	0.00316681
rs659991	13	G	0.826	-0.0695	0.0005218	0.89357749	0.1614922	0.57099799	0.00993205	0.0040429	0.00087482	0.00271686
rs6602301	10	C	0.5854	0.0517	0.0008526	0.83616199	0.03098939	0.99331717	0.00603451	0.00587878	0.00030494	0.00683783
rs662774	7	A	0.3858	-0.0553	0.0005892	0.88907281	0.8668289	0.71224482	0.04134519	0.00448111	0.00438194	0.00368292
rs6687999	1	G	0.933	-0.1098	0.0002955	0.74615757	0.07593012	0.67713842	0.00366551	0.00207694	0.00026262	0.00190424
rs6706771	2	G	0.2582	-0.0685	9.00E-05	0.64263609	0.49742092	0.03395746	0.00053967	0.00062233	0.00049317	4.19E-05
rs6708730	2	C	0.6734	0.0563	0.0004898	0.68829571	0.88321422	0.7795597	0.03297257	0.00303248	0.00378338	0.00338702
rs6710605	2	T	0.5174	-0.062	4.97E-05	0.33536245	0.15078263	0.80074439	0.00095893	0.00020019	9.60E-05	0.00044333
rs6713330	2	G	0.507	-0.0571	0.0001737	0.18030648	0.05002453	0.46000591	0.0004228	0.00035614	0.00010995	0.00083376
rs6723899	2	T	0.6737	0.0559	0.0005358	0.68743017	0.88385685	0.77156046	0.03480769	0.0032805	0.00409885	0.00363425
rs6725814	2	G	0.392	-0.0538	0.0005269	0.69931432	0.04204891	0.74921198	0.00373213	0.00328164	0.00025961	0.00348858
rs6730730	2	A	0.8821	0.08	0.0007431	0.47150725	0.51293982	0.46994939	0.01620619	0.00313815	0.00338181	0.00312894
rs673330	11	A	0.8436	-0.0771	0.0002384	0.55712007	0.56455532	0.23484097	0.00511568	0.00131842	0.00133423	0.00060411
rs673429	18	T	0.9352	0.1077	0.0005065	0.20936862	0.67890373	0.75210444	0.01175477	0.00107653	0.00308628	0.00338004
rs6738207	2	G	0.5999	-0.0579	0.0001811	0.61995661	0.57286568	0.38516315	0.00660628	0.00113336	0.00105547	0.00073733
rs6743998	2	T	0.2588	-0.0673	0.0001218	0.71322342	0.59503711	0.03970398	0.00097331	0.00089921	0.00076333	6.40E-05
rs6744481	2	A	0.8929	0.0836	0.0005173	0.88973078	0.80619012	0.54064474	0.02981569	0.00399675	0.0036626	0.00256795
rs6753046	2	G	0.5895	-0.0535	0.0005026	0.50880671	0.49312716	0.26618738	0.00827751	0.00237094	0.00230564	0.00132706
rs6756374	2	C	0.2584	-0.0679	0.0001037	0.64276681	0.50126964	0.04435922	0.00075218	0.00070761	0.00056476	6.11E-05
rs6764992	3	T	0.8825	-0.0896	0.0001724	0.08118536	0.93542738	0.97141175	0.00400036	0.00017043	0.00156953	0.00162358
rs6772446	3	A	0.9619	0.1304	0.0009635	0.14106033	0.74463579	0.33997999	0.00843	0.001346	0.0059117	0.00295593
rs6779450	3	T	0.2041	0.0691	0.0001992	0.76553594	0.03773659	0.08203948	0.00030061	0.00149268	9.62E-05	0.00019646
rs6783510	3	A	0.4261	0.0536	0.0004789	0.43036049	0.84177725	0.32179839	0.0120192	0.0019553	0.00355407	0.00150686
rs679884	18	C	0.6578	0.0581	0.0002279	0.94114467	0.45410867	0.50420585	0.01094702	0.00202631	0.00105313	0.00115729
rs681422	5	T	0.0869	0.0987	0.0002266	0.18949816	0.10605789	0.89388149	0.00166541	0.00047473	0.00027965	0.00192517
rs6822371	4	C	0.6577	-0.0547	0.0006733	0.16840035	0.84820199	0.84661038	0.01578574	0.00114345	0.004836	0.004828
rs6824643	4	G	0.6152	0.0563	0.0003015	0.52915715	0.69162806	0.18379911	0.00568842	0.00155444	0.00197588	0.00059852
rs6825793	4	G	0.6596	-0.0574	0.0003416	0.43445725	0.64148179	0.98428039	0.01745629	0.00145673	0.00206549	0.0030253
rs6829701	4	G	0.6709	0.0648	5.28E-05	0.35238663	0.43515397	0.49488837	0.00164473	0.00022122	0.00026834	0.00030181
rs6834257	4	A	0.2179	0.062	0.0005473	0.96708594	0.98867425	0.55424646	0.03839896	0.00452221	0.00461121	0.00276059
rs6845983	4	G	0.9476	0.1254	0.0002457	0.0915363	0.46608499	0.23992538	0.00114239	0.00026319	0.00115374	0.00063305
rs6847325	4	G	0.8976	-0.083	0.0008291	0.81059767	0.20416948	0.97050229	0.02239696	0.00558162	0.00163927	0.00653782
rs6851312	4	A	0.6146	0.0563	0.000303	0.53184423	0.67344302	0.19082003	0.0057781	0.00156849	0.00193792	0.00062202

rs6863278	5	G	0.9349	-0.1163	0.0001811	0.95924208	0.4703207	0.65230036	0.01161979	0.00167779	0.00088333	0.00118648
rs6866246	5	G	0.8391	0.0757	0.0002619	0.95046778	0.88064115	0.0573523	0.00396551	0.00231461	0.00216217	0.00018184
rs6871146	5	G	0.8419	0.0729	0.0005057	0.10482614	0.31608904	0.10636141	0.00087056	0.0005749	0.00155711	0.00058254
rs6872312	5	G	0.8777	0.0963	3.89E-05	0.62098682	0.61118867	0.14797607	0.00102272	0.00028103	0.00027697	7.52E-05
rs6873939	5	C	0.9371	-0.1174	0.0001991	0.93346896	0.5801068	0.60638655	0.01347727	0.00178244	0.00116264	0.00120996
rs6882823	5	T	0.32	-0.0591	0.0003328	0.59856652	0.47929682	0.33700785	0.00802246	0.00189665	0.00155417	0.00113229
rs6885417	5	G	0.8787	0.0946	5.27E-05	0.53790337	0.57436595	0.14511303	0.00108743	0.00032512	0.00034517	9.77E-05
rs6887003	5	C	0.1904	-0.0645	0.0007535	0.69112468	0.32071862	0.37760367	0.01313082	0.00445784	0.00225421	0.00260758
rs689848	11	T	0.2054	-0.0701	0.0002662	0.55987248	0.29121131	0.58318418	0.00671295	0.00146226	0.00081125	0.00151681
rs6901785	6	T	0.4476	-0.0534	0.0005091	0.64372002	0.47889206	0.09149762	0.00438582	0.00295712	0.00227204	0.0005112
rs6927133	6	A	0.9325	-0.1087	0.0003707	0.74912782	0.19347837	0.1796078	0.00324184	0.00255179	0.00075615	0.00070689
rs6928545	6	A	0.6939	0.058	0.0005589	0.37258574	0.21192536	0.2767742	0.0038794	0.00197344	0.00118931	0.00151195
rs6940021	6	G	0.5268	0.0543	0.0003945	0.66999229	0.65958371	0.08285445	0.00440539	0.00244181	0.00240795	0.00037029
rs6947017	7	G	0.0929	-0.0991	0.0001477	0.54969549	0.08454951	0.50320148	0.00146509	0.0008459	0.00015349	0.00078092
rs6950574	7	A	0.7013	-0.0546	0.0008848	0.58634991	0.37681098	0.33042721	0.01336043	0.00444302	0.00300268	0.00267146
rs6950973	7	A	0.3224	0.0651	6.97E-05	0.43181416	0.19020211	0.40374887	0.00106855	0.00034331	0.00016208	0.00032289
rs6957022	7	T	0.622	0.054	0.0005842	0.3878271	0.95585312	0.76991932	0.02621996	0.00212804	0.00474113	0.00391618
rs6967408	7	A	0.3205	0.0656	6.26E-05	0.50235939	0.1620057	0.47388224	0.00110555	0.00035721	0.00012666	0.00033869
rs6967507	7	T	0.6962	0.056	0.0006909	0.74240753	0.99826019	0.26204788	0.02251646	0.00439856	0.00571019	0.0017411
rs697635	12	G	0.6729	-0.0553	0.00067	0.38779476	0.88739091	0.06592014	0.00457823	0.00240479	0.00501071	0.00048705
rs6987678	8	C	0.7185	-0.0602	0.0003078	0.71347119	0.53456277	0.24936944	0.00747978	0.0020695	0.00159806	0.00080401
rs6990230	8	A	0.8027	-0.0665	0.0005188	0.23116514	0.09136152	0.88951615	0.00326647	0.00120272	0.00051934	0.00400615
rs6998032	8	C	0.7751	-0.0642	0.0003616	0.70456834	0.11814098	0.54193355	0.00482907	0.00236305	0.00047252	0.00186902
rs7013730	8	T	0.7272	0.059	0.0004992	0.63890609	0.38001911	0.48116558	0.01240644	0.00288658	0.00181549	0.00224202
rs7030789	9	A	0.3176	0.062	0.0001491	0.61002705	0.52852318	0.70754901	0.00835853	0.0009373	0.00082338	0.0010715
rs7036586	9	T	0.9819	-0.1922	0.0007878	NA	0.16105482	NA	0.00126527	0.0007878	0.00126527	0.0007878
rs7042444	9	A	0.6047	0.0543	0.0005159	0.56667438	0.53821863	0.4272943	0.01375275	0.00267134	0.00255151	0.00207653
rs7075197	10	T	0.7859	0.0645	0.0006257	0.40037056	0.86901647	0.74254962	0.02565894	0.00232776	0.00463108	0.0040302
rs7078039	10	C	0.2584	0.0708	4.18E-05	0.20486594	0.92005783	0.19133196	0.0007628	0.00010855	0.0004297	0.00010193
rs7082651	10	T	0.585	0.052	0.0007906	0.81717	0.02922324	0.97976464	0.00530869	0.00539108	0.00026975	0.0063232
rs7089898	10	C	0.7858	0.0632	0.0008317	0.3901759	0.90535179	0.73572503	0.03139341	0.00293136	0.00616802	0.00513933
rs7095016	10	G	0.7751	0.0618	0.0008957	0.98854763	0.98866514	0.96671028	0.07795454	0.00710959	0.00711033	0.00697188
rs711714	3	T	0.8706	0.0785	0.0006795	0.58784004	0.06592167	0.27076515	0.00257024	0.00352522	0.00049333	0.00176638

rs711715	3	A	0.7932	0.0646	0.0006745	0.71492074	0.29041212	0.71748817	0.01834664	0.00416494	0.00186833	0.00417816
rs711716	3	C	0.7932	0.0646	0.0006726	0.70967985	0.28779091	0.71198407	0.0179978	0.00412762	0.00184855	0.00413947
rs7120021	11	G	0.6214	0.0557	0.0002804	0.69741066	0.13969428	0.3448399	0.00318263	0.00186552	0.00043665	0.00099052
rs7121722	11	T	0.8114	0.068	0.0005548	0.74828111	0.33479743	0.51744958	0.01443811	0.00364784	0.00178151	0.00262844
rs7160649	14	C	0.68	-0.0559	0.0006618	0.2647391	0.47233983	0.1071354	0.00303836	0.00169064	0.00283542	0.00074832
rs716710	5	G	0.3396	-0.0565	0.0004859	0.18791213	0.30325796	0.9645262	0.00698673	0.00094057	0.0014474	0.00406126
rs716866	5	G	0.4391	0.0531	0.000528	0.33091971	0.52097295	0.59816807	0.01180249	0.0016865	0.00253026	0.00286154
rs7176006	15	T	0.597	0.0518	0.00089	0.73377252	0.32167637	0.049315	0.00342229	0.00544248	0.002622	0.00048428
rs7178681	15	G	0.8931	-0.0902	0.000326	0.16436384	0.21193571	0.9558939	0.00354638	0.00058053	0.00073099	0.00282757
rs7185798	16	C	0.2758	-0.06	0.0004901	0.42256841	0.9527695	0.13172523	0.00684699	0.00196379	0.00404814	0.00068742
rs7193972	16	A	0.4494	0.0579	0.0001153	0.52220507	0.33321091	0.15133775	0.00132442	0.00064531	0.00042903	0.00020863
rs7196364	16	G	0.8347	-0.0677	0.0009766	0.81066391	0.635441	0.26471791	0.02239755	0.00644545	0.00520341	0.00239406
rs7198251	16	A	0.8287	-0.0699	0.0005384	0.86765651	0.70375576	0.272795	0.01691748	0.00404963	0.00336398	0.00144316
rs720644	15	A	0.6052	0.052	0.0009358	0.67433076	0.32596514	0.05696838	0.00375903	0.00528062	0.00277434	0.00057786
rs7209407	17	G	0.6615	0.0611	0.000138	0.14305478	0.56559457	0.42956261	0.00189194	0.0002336	0.00081628	0.00063626
rs7209748	17	G	0.6652	0.0569	0.0004175	0.13865242	0.71716403	0.46484106	0.00548024	0.0006227	0.00272878	0.00185285
rs7213173	17	G	0.6756	0.0568	0.0004565	0.15162733	0.70704962	0.48271549	0.00637638	0.0007322	0.00291736	0.00207584
rs7213463	17	A	0.7896	0.0623	0.0007375	0.22731257	0.3207961	0.68127016	0.00882983	0.00162508	0.0022119	0.00431897
rs7215091	17	C	0.86	-0.0746	0.0006528	0.73938965	0.23597401	0.05578528	0.00235191	0.00416845	0.00150628	0.00040861
rs7221943	17	C	0.9471	0.1152	0.0006086	0.87200666	0.22224212	0.66320094	0.01533772	0.0045329	0.00134017	0.00355796
rs7237247	18	T	0.8716	0.0788	0.0004626	0.79132358	0.96727178	0.80074682	0.03781107	0.00326264	0.00389824	0.0032971
rs7250332	19	T	0.3714	0.0584	0.0001553	0.24723723	0.12137668	0.39985468	0.00090182	0.00042879	0.00022392	0.00066362
rs7252434	19	A	0.4568	0.0506	0.0008146	0.66420703	0.18496238	0.99394711	0.01821549	0.00461093	0.00147663	0.00657361
rs7260222	19	C	0.6585	-0.0621	0.0001313	0.02476796	0.96497895	0.20402525	0.0003844	4.43E-05	0.00126368	0.00030881
rs727276	1	T	0.9682	-0.1728	8.43E-05	0.15682798	0.94838375	0.00039926	6.84E-06	0.0001617	0.00083402	6.13E-07
rs7276817	21	G	0.8009	0.0659	0.0005093	0.56347884	0.32846485	0.29641187	0.00722524	0.00262762	0.00162198	0.0014792
rs7278642	21	G	0.4667	-0.0519	0.0008235	0.54819819	0.57605774	0.34887016	0.01705786	0.00392892	0.00410508	0.00263018
rs7298683	12	G	0.0396	-0.1341	0.0006553	0.36952204	0.14861444	0.48399139	0.00507368	0.00225826	0.00099693	0.00287223
rs7303030	12	A	0.7735	-0.0638	0.0004715	0.16249066	0.76779753	0.09531772	0.00213532	0.00080267	0.00323057	0.00049482
rs7303111	12	G	0.7741	-0.0634	0.0005185	0.1536084	0.71585379	0.09531338	0.00208424	0.00083134	0.00330299	0.00053943
rs7313855	12	A	0.8723	-0.0797	0.0004861	0.524371	0.26079753	0.24323699	0.00479729	0.00236408	0.00126433	0.00118744
rs7314280	12	C	0.8346	-0.0815	5.60E-05	0.79549066	0.12325494	0.13538176	0.00043356	0.00049103	8.90E-05	9.70E-05
rs731703	11	G	0.6888	0.0544	0.0009747	0.82118004	0.70059436	0.27390743	0.02475775	0.0065076	0.00566045	0.00246376

rs731773	19	T	0.6833	0.0748	6.02E-06	0.20720926	0.49937443	0.63596406	0.00026083	1.82E-05	4.12E-05	5.16E-05
rs7318687	13	G	0.3846	-0.0533	0.0007466	0.83369267	0.05282492	0.54863126	0.00520939	0.00521717	0.00043938	0.00360468
rs7318895	13	T	0.6864	0.0552	0.0006922	0.90256019	0.08336396	0.16756484	0.00300181	0.00523427	0.00062091	0.00116708
rs7321102	13	C	0.7654	0.0605	0.0007278	0.03204694	0.25723601	0.90353254	0.00208027	0.0002721	0.00179414	0.00547571
rs7323023	13	A	0.7744	-0.0608	0.0008297	0.8025763	0.99832413	0.86452768	0.06065515	0.00553652	0.0067061	0.00591055
rs7324010	13	A	0.4291	0.0531	0.0004484	0.67028714	0.48386193	0.3386902	0.01097065	0.00273803	0.00204722	0.00148717
rs7324069	13	C	0.6334	0.0538	0.0005425	0.34557195	0.50679381	0.66638211	0.01316793	0.00179634	0.00252913	0.00322657
rs7327483	13	C	0.7367	0.0595	0.0006367	0.58146195	0.7368355	0.01965718	0.00206282	0.00329546	0.00406494	0.0001538
rs7330236	13	T	0.7744	-0.0608	0.0008288	0.78416119	0.98258719	0.99290435	0.06468219	0.00541941	0.00660705	0.00666783
rs7336995	13	T	0.6864	0.0552	0.0006942	0.90167026	0.08327007	0.17060207	0.00304519	0.00524303	0.0006219	0.0011892
rs7349532	3	C	0.7816	-0.0667	0.0007695	0.6137732	0.51490067	0.14264938	0.00848112	0.00408911	0.00349999	0.00111054
rs736095	5	G	0.9611	-0.1417	0.0004106	0.16313107	0.88341575	0.25864261	0.00460228	0.00071075	0.00323623	0.00107794
rs737769	22	T	0.8982	0.1087	1.58E-05	0.50218543	0.767448	0.32593248	0.00094789	0.00010112	0.00014939	6.79E-05
rs7424415	2	T	0.2587	-0.0683	9.53E-05	0.66131031	0.41360376	0.02849915	0.00043304	0.00067226	0.00043894	3.75E-05
rs744668	1	C	0.1638	-0.0701	0.0006539	0.68510081	0.51605324	0.21613891	0.01108637	0.0039023	0.00303503	0.00139417
rs746187	13	A	0.6102	0.0534	0.0007057	0.97108058	0.16369442	0.59587398	0.01369517	0.0056781	0.00116282	0.00368956
rs748328	1	C	0.1862	0.0686	0.000508	0.61348598	0.74514579	0.481098	0.01978323	0.0028278	0.00336108	0.00227698
rs7504590	18	T	0.7166	0.0577	0.000537	0.62033555	0.2744526	0.2188096	0.00563024	0.00300042	0.00144765	0.00118077
rs755326	19	T	0.9508	0.1444	3.55E-05	0.11948748	0.69098101	0.62879655	0.00089438	5.67E-05	0.00028508	0.00026153
rs755517	4	C	0.2944	-0.0555	0.0008306	0.56546336	0.0217159	0.00382677	3.87E-05	0.00406901	0.00021506	4.34E-05
rs7561156	2	A	0.9207	-0.0961	0.0005776	0.38134746	0.08314502	0.95989986	0.00510926	0.00207506	0.00052557	0.00471137
rs7562658	2	A	0.4942	0.0612	6.36E-05	0.28658641	0.28787724	0.06788952	0.00023912	0.000217	0.0002179	5.76E-05
rs7567189	2	G	0.5178	0.0608	5.55E-05	0.30943334	0.21837689	0.54283	0.00096751	0.00020571	0.0001494	0.00034392
rs7580284	2	C	0.5574	0.0525	0.000657	0.30061732	0.64710432	0.29903571	0.00910882	0.00188218	0.0037256	0.00187331
rs7592750	2	C	0.8485	-0.0818	0.0003239	0.36494123	0.16634506	0.61603996	0.00385494	0.00118714	0.00058344	0.00189948
rs7596016	2	T	0.2658	-0.069	6.81E-05	0.65760664	0.58427305	0.10730606	0.00124517	0.00049303	0.00044275	9.37E-05
rs7598263	2	T	0.6903	-0.0604	0.000217	0.45964803	0.5260973	0.91296296	0.01075061	0.00101867	0.00115052	0.00188736
rs7598800	2	T	0.4536	-0.0511	0.0006711	0.23921214	0.1803572	0.79731938	0.00626742	0.00156313	0.00121273	0.0045659
rs7598906	2	T	0.4538	-0.0514	0.0006276	0.23981893	0.17398314	0.79660993	0.00580976	0.00147522	0.00110528	0.00430009
rs7603001	2	A	0.4649	-0.0519	0.0006621	0.69131349	0.5802737	0.97918904	0.03564684	0.00397723	0.00340568	0.00540773
rs7603249	2	C	0.843	-0.0752	0.0002886	0.14500143	0.00044898	0.10112091	2.99E-06	0.00046373	2.18E-06	0.00033391
rs7605382	2	T	0.4917	0.0621	5.32E-05	0.28755048	0.32516634	0.07036054	0.0002357	0.00018479	0.00020684	5.05E-05
rs7623750	3	G	0.6848	-0.0548	0.0007251	0.30066046	0.26544294	0.90093673	0.01143515	0.00205604	0.00183918	0.00544403

rs7627904	3	C	0.6849	-0.0537	0.000919	0.2843196	0.30370414	0.89958138	0.01436071	0.0024169	0.00256327	0.00669478
rs7634663	3	T	0.9331	0.1157	0.0001406	0.74878764	0.28496302	0.63578458	0.00543247	0.00106952	0.00044573	0.00092274
rs7639667	3	C	0.4231	0.0567	0.0002257	0.47094784	0.88957389	0.4726403	0.01021757	0.0010788	0.00191005	0.00108229
rs7639998	3	G	0.4232	0.057	0.0002098	0.45337753	0.89917998	0.43992464	0.00900463	0.00097595	0.00180642	0.00094977
rs7660477	4	C	0.5315	0.0547	0.0002815	0.13584781	0.62176096	0.03146154	0.00043565	0.00042721	0.0016891	0.0001119
rs766103	15	C	0.495	-0.0577	0.000118	0.31784308	0.18791707	0.57601502	0.00166185	0.00041972	0.00025981	0.00072024
rs7671181	4	T	0.7672	-0.0594	0.000834	0.62550866	0.85193529	0.75883425	0.04253255	0.00446473	0.0058614	0.0052941
rs7680473	4	T	0.8829	-0.0863	0.0004176	0.74237142	0.77500993	0.47597408	0.02011302	0.00281459	0.00292441	0.00189293
rs7691720	4	A	0.884	-0.0837	0.0004824	0.78269488	0.73404505	0.40256028	0.01976419	0.0033535	0.00316778	0.00185391
rs7720858	5	C	0.9827	-0.2075	0.0003143	NA	0.26577198	NA	0.00086792	0.0003143	0.00086792	0.0003143
rs7726283	5	T	0.3389	0.0583	0.0002786	0.73356332	0.29621128	0.54150571	0.00813367	0.00194062	0.00085845	0.00147833
rs7726844	5	G	0.6011	0.0538	0.0006219	0.06778991	0.74011318	0.83857213	0.00688095	0.00046687	0.00399689	0.00446348
rs7736548	5	G	0.4438	0.0515	0.0007669	0.9597984	0.45271458	0.29344601	0.01799499	0.00604621	0.00311275	0.00211523
rs7742896	6	C	0.8581	-0.0726	0.0009298	0.49370409	0.76769685	0.57004771	0.02984453	0.00398744	0.00588525	0.00452782
rs7746249	6	C	0.4956	-0.051	0.0008269	0.68866129	0.41489311	0.47459655	0.01983422	0.00482375	0.00307998	0.00347043
rs7760665	6	G	0.6487	-0.0552	0.0005189	0.86908055	0.51227801	0.32544989	0.01490728	0.00392526	0.00245424	0.00163579
rs7770341	6	A	0.9595	-0.1373	0.0002952	0.90098361	0.40548696	5.56E-05	7.98E-06	0.00245547	0.00120065	3.11E-07
rs7783688	7	C	0.0687	-0.0993	0.0008799	0.32711721	0.34267913	0.29621512	0.00746886	0.00263455	0.00274587	0.00241154
rs778554	4	T	0.5535	0.052	0.0006099	0.29955021	0.56093727	0.75897931	0.01527564	0.00175528	0.00307232	0.00401706
rs7791283	7	T	0.7491	-0.06	0.00058	0.49644085	0.98285477	0.81646179	0.03286892	0.00263541	0.00482824	0.00409868
rs7796934	7	G	0.6235	0.0535	0.000683	0.42424026	0.87799486	0.31867337	0.01573718	0.00265025	0.0050487	0.00205304
rs7799246	7	T	0.7723	-0.0597	0.0009112	0.57882384	0.09627631	0.30632598	0.00465899	0.00450816	0.00090721	0.00256344
rs7804751	7	A	0.6491	-0.0557	0.0005004	0.96465334	0.84094031	0.88025565	0.04422344	0.00416875	0.00369188	0.00384435
rs7809567	7	T	0.32	0.0663	5.22E-05	0.50460701	0.16283931	0.47388224	0.00096518	0.00030382	0.00010765	0.00028687
rs7810052	7	T	0.3201	0.0663	5.26E-05	0.50063616	0.16611671	0.48640812	0.00100127	0.00030396	0.00011049	0.00029606
rs7820543	8	A	0.616	-0.0537	0.0005151	0.86942502	0.70203409	0.19720599	0.0129698	0.00390117	0.00322741	0.00103558
rs7821860	8	G	0.5211	-0.0512	0.0007584	0.22160654	0.51664677	0.94595525	0.01588543	0.00162876	0.00346557	0.00591138
rs7829101	8	A	0.6273	-0.0527	0.0008248	0.86051612	0.75513772	0.72554527	0.04680936	0.00585589	0.00522014	0.0050395
rs7849719	9	G	0.7936	0.0635	0.0007145	0.1536448	0.34300824	0.02814412	0.00057584	0.00111064	0.00228265	0.00023757
rs7853148	9	T	0.3729	0.0531	0.000799	0.61702332	0.76579926	0.0720082	0.00707969	0.00424721	0.00513912	0.00061925
rs7862893	9	C	0.7017	-0.0607	0.0005005	0.84770977	0.65699169	0.043102	0.0038311	0.00371885	0.00296599	0.00025335
rs7900830	10	G	0.7796	0.0628	0.0005062	0.03322488	0.95907797	0.71216402	0.00370256	0.0002017	0.00418991	0.00321853
rs790328	13	G	0.2657	-0.0705	3.25E-05	0.96875803	0.38819433	0.64621309	0.00277735	0.00035735	0.00015472	0.00024686

rs790330	13	C	0.3666	-0.0538	0.0005427	0.32327563	0.57185166	0.71409056	0.01439786	0.0016927	0.00281725	0.00343191
rs790346	11	T	0.7522	0.0581	0.0008413	0.75746857	0.46936747	0.56347844	0.02641736	0.00532642	0.00348952	0.00410256
rs7911801	10	A	0.8797	-0.0861	0.0002178	0.7408105	0.94635232	0.65639953	0.01831409	0.00157023	0.00195543	0.00140861
rs7926308	11	T	0.8189	-0.0709	0.0003593	0.12544033	0.39123709	0.31946426	0.00214304	0.00049611	0.00138741	0.00115615
rs7926428	11	C	0.8706	-0.1057	1.18E-05	0.79995289	0.80762532	0.33365862	0.00115568	0.00011903	0.00012008	5.31E-05
rs7931324	11	C	0.9076	-0.0934	0.0003927	0.67534216	0.924429	0.66109564	0.02570607	0.00244919	0.00323855	0.00240305
rs7937452	11	C	0.8676	-0.0832	0.0001805	0.66004845	0.12137766	0.73996446	0.00350778	0.00119558	0.00025696	0.00132508
rs7939737	11	G	0.9436	-0.1613	3.09E-06	0.3635564	0.5616834	0.21123184	0.00010708	1.65E-05	2.48E-05	9.95E-06
rs794861	6	C	0.2466	0.0593	0.0006251	0.8705805	0.8983703	0.92392491	0.05173297	0.00463451	0.0047648	0.00488414
rs7949336	11	A	0.7395	-0.06	0.0005431	0.06510006	0.28614037	0.14317955	0.00073859	0.00039775	0.00151821	0.00081352
rs7955810	12	T	0.8345	-0.0815	5.71E-05	0.79549806	0.12325494	0.13538176	0.00043996	0.00049923	9.05E-05	9.86E-05
rs7966190	12	C	0.8345	-0.0816	5.48E-05	0.79549806	0.12325494	0.13538176	0.00042609	0.00048146	8.72E-05	9.51E-05
rs7969052	12	C	0.8458	-0.0813	9.15E-05	0.1890703	0.09430598	0.20912522	0.00023109	0.00020707	0.00010929	0.00022711
rs7981720	13	T	0.8198	0.0681	0.0004485	0.12995947	0.1625256	0.48433936	0.00182785	0.00062659	0.00076731	0.00204944
rs7982295	13	C	0.6327	0.0536	0.0005664	0.33020794	0.60090119	0.71025924	0.01556282	0.00179254	0.00305823	0.00354754
rs7984412	13	G	0.7744	-0.0608	0.0008317	0.77152958	0.95174732	0.99472991	0.06289922	0.00535895	0.00644455	0.00669905
rs7986033	13	C	0.7743	-0.0605	0.0008843	0.77141409	0.95114538	0.99463608	0.06543069	0.00565529	0.00679675	0.0070682
rs7993004	13	A	0.6799	0.0562	0.000717	0.23646447	0.8676802	0.2632727	0.00919838	0.0016416	0.00521489	0.00180744
rs7993465	13	A	0.609	0.0542	0.0004871	0.90635086	0.1616043	0.55884818	0.00939692	0.00385211	0.00082257	0.00250681
rs8002991	13	C	0.6877	0.0539	0.0009099	0.93560113	0.07947102	0.13797098	0.00316039	0.00686895	0.00076176	0.00125325
rs8003773	14	C	0.8115	-0.0675	0.0003805	0.52305878	0.44841159	0.44083019	0.00930497	0.00189512	0.00165094	0.00162588
rs8014186	14	T	0.0704	0.104	0.0005739	0.35350356	0.63983884	0.62997857	0.01583516	0.00192791	0.00327163	0.00322683
rs8020153	14	C	0.0717	0.1014	0.0006794	0.25508174	0.94836496	0.5562506	0.0171513	0.00167418	0.00537834	0.00335622
rs8024985	15	A	0.3464	0.0582	0.0002565	0.87638528	0.66829922	0.37608324	0.01212386	0.00211313	0.00165786	0.00098842
rs8033375	15	T	0.8708	-0.0995	1.75E-05	0.00928107	0.92265332	0.37011613	5.19E-05	2.71E-06	0.00019471	8.40E-05
rs8046133	16	A	0.9228	0.0962	0.0006741	0.37024115	0.34876373	0.91185296	0.01549949	0.00232002	0.00219949	0.00515988
rs8054180	16	C	0.3685	0.0553	0.000531	0.24969059	0.8730251	0.65005847	0.01491574	0.00131635	0.00402224	0.00309677
rs8063973	16	G	0.7161	0.059	0.0004369	0.27309584	0.36239861	0.34126034	0.00447706	0.00119718	0.00154387	0.00146277
rs8064150	16	A	0.1902	-0.0726	0.0001483	0.59129742	0.41506125	0.5512894	0.00564294	0.00090686	0.00065835	0.00085123
rs8065820	17	G	0.9139	-0.0928	0.0008505	0.7800024	0.33627509	0.08377417	0.00534978	0.00551819	0.00261964	0.00075164
rs8068673	17	T	0.6627	0.0613	0.0001389	0.14210178	0.56569057	0.42935116	0.00189119	0.00023356	0.00082122	0.00063974
rs8072459	17	A	0.317	0.0568	0.0007635	0.59911012	0.77350493	0.45342582	0.0255232	0.00397494	0.00498112	0.00310482
rs8080801	17	T	0.9469	0.1141	0.0006379	0.82732608	0.16775235	0.77045635	0.01389671	0.00451063	0.00108535	0.00423557

rs8083213	18	A	0.2173	-0.063	0.0006777	0.2065998	0.97374504	0.83353408	0.02002342	0.00138245	0.00549268	0.0047896
rs8085058	18	T	0.6864	-0.0605	0.0002206	0.0720509	0.61403596	0.91100384	0.00304494	0.00019152	0.00134195	0.00191168
rs8092564	18	C	0.2629	0.0615	0.0006739	0.28238405	0.69648657	0.73894939	0.01801542	0.00182057	0.00406662	0.00428508
rs8097669	18	C	0.3438	0.0747	7.67E-06	0.91948511	0.43258789	0.77225303	0.00108538	9.07E-05	4.52E-05	7.72E-05
rs8099053	18	A	0.6106	-0.0552	0.0004267	0.21221804	0.86690202	0.67152866	0.01152761	0.00093357	0.00329301	0.00262404
rs8099574	18	G	0.5561	0.0625	4.41E-05	0.5561676	0.83043535	0.19131652	0.0016102	0.00028502	0.00041088	0.00010705
rs8100988	19	C	0.2961	0.0664	6.30E-05	0.36174529	0.6109901	0.43015013	0.00224685	0.00026636	0.00042971	0.00031203
rs8123772	20	A	0.9467	-0.114	0.0008963	0.56673551	0.8081162	0.62865804	0.03545779	0.00436093	0.00596132	0.00477898
rs8130856	21	A	0.9435	-0.1263	0.000146	0.65226565	0.68024774	0.90276567	0.01243151	0.00097699	0.00101473	0.00130936
rs8139515	22	A	0.8392	0.0701	0.0007898	0.10119612	0.44878721	0.52233671	0.00535994	0.00083397	0.00317055	0.00362755
rs8139784	22	G	0.8409	0.0722	0.0005805	0.09391363	0.4513107	0.52188791	0.00402951	0.00058971	0.00242264	0.00275748
rs827423	6	G	0.4911	0.0547	0.0002657	0.75171313	0.27044928	0.11367791	0.00229073	0.00190114	0.00075745	0.00034456
rs830383	5	A	0.3818	-0.0671	1.89E-05	0.11186992	0.56576194	0.07746593	7.94E-05	2.98E-05	0.00013315	2.11E-05
rs8339	18	G	0.8938	0.0836	0.0006651	0.69937928	0.98530895	0.88721663	0.0482308	0.00403437	0.00545914	0.00497753
rs842740	2	C	0.7593	0.0676	0.0001567	0.49328461	0.73223577	0.27741955	0.00469224	0.00080914	0.00115577	0.00048007
rs858027	21	A	0.0701	0.1091	0.0002625	0.26640337	0.15258519	0.62528743	0.00244224	0.00073903	0.00044561	0.00159457
rs860798	21	C	0.6096	-0.0519	0.000811	0.7050256	0.88061137	0.47900625	0.03385205	0.00484109	0.00588794	0.00343927
rs873116	2	C	0.674	0.0565	0.000503	0.66525889	0.81264394	0.7701232	0.0307152	0.00301246	0.00359806	0.00343061
rs881210	11	G	0.6074	-0.0525	0.0008025	0.44865777	0.08075161	0.48763433	0.00434367	0.00321497	0.00068978	0.00346166
rs885691	17	T	0.1947	0.0632	0.000963	0.84047114	0.82863919	0.55901609	0.04567632	0.00657151	0.00649031	0.00459038
rs894445	11	A	0.0883	0.1026	0.0002232	0.44828153	0.3802628	0.2917282	0.00360704	0.00102155	0.00088052	0.00069277
rs898614	11	C	0.3571	-0.0577	0.0002738	0.30743927	0.77387975	0.44947101	0.00748082	0.00087397	0.00200435	0.001231
rs898935	2	C	0.7402	0.067	0.0001207	0.54435791	0.63214592	0.2844684	0.00378269	0.00069846	0.00079969	0.00038728
rs907141	2	C	0.3449	0.0553	0.0007203	0.78592049	0.72312169	0.06116795	0.00665922	0.00479867	0.00445861	0.00048597
rs909934	1	G	0.2024	0.064	0.0007428	0.09777298	0.94109188	NA	0.00386735	0.00076476	0.00577815	0.0007428
rs911158	20	A	0.4964	0.0511	0.0007247	0.04715579	0.96635773	0.84946257	0.00724678	0.00038562	0.00578742	0.00516672
rs918042	12	A	0.7788	-0.0678	0.0002321	0.39102276	0.95870159	0.98281392	0.01635065	0.00093546	0.00209398	0.00214098
rs918043	12	C	0.7774	-0.0689	0.0001798	0.39100894	0.95668458	0.95805839	0.01333677	0.00074259	0.001663	0.00166514
rs923307	4	A	0.1821	-0.0659	0.0007498	0.78518155	0.16386782	0.83642818	0.0156844	0.00496743	0.00122922	0.00525199
rs923345	3	A	0.5942	0.0562	0.0002322	0.81749142	0.02340956	0.63880323	0.00125634	0.00181648	7.13E-05	0.00145602
rs928738	21	G	0.8578	0.077	0.0003314	0.21681755	0.2354984	0.81146037	0.00423964	0.0007574	0.0008162	0.00247972
rs9290607	3	A	0.8602	-0.0861	0.0003627	0.81057175	0.52494663	0.04956459	0.00271312	0.00268474	0.00182142	0.0002144
rs9292877	5	C	0.9701	-0.1658	0.0001651	0.34477287	0.66523315	0.42737378	0.00480033	0.00061327	0.0011111	0.00074504

rs9301973	13	G	0.6864	0.055	0.0007298	0.62167315	0.10989458	0.1688463	0.00292013	0.00394629	0.00083658	0.00123243
rs9305055	19	T	0.308	-0.0582	0.0003854	0.37573696	0.8801796	0.28706456	0.00882103	0.00142493	0.00304921	0.00111844
rs9305623	21	C	0.4063	0.0506	0.0009858	0.83716437	0.84646831	0.67683694	0.05332701	0.00668457	0.00674964	0.00554624
rs9309807	3	A	0.5665	0.0508	0.0009359	0.42215669	0.54434561	0.98737267	0.0310116	0.00349122	0.00437221	0.00738038
rs9315892	13	G	0.8411	-0.0719	0.0004651	0.6495423	0.15163	0.87046424	0.00939737	0.00275056	0.00074469	0.00356756
rs9316890	13	G	0.6334	0.0538	0.0005425	0.40985133	0.54126889	0.59382077	0.01437219	0.00209255	0.00268185	0.00291238
rs9316891	13	C	0.6334	0.0538	0.0005424	0.33854416	0.51711406	0.6751926	0.01328823	0.00176329	0.00257455	0.00326389
rs9318385	13	A	0.4421	0.0538	0.0005862	0.49304897	0.94669861	0.28561295	0.01532763	0.00264429	0.00471524	0.00162319
rs9318386	13	C	0.4438	0.0515	0.0007919	0.50975763	0.95772243	0.29807024	0.02022224	0.00355837	0.00620712	0.00220735
rs9318387	13	C	0.4438	0.0514	0.0007936	0.51215684	0.95946216	0.2992992	0.02040592	0.00358001	0.00622873	0.00221972
rs9320692	6	A	0.8471	0.0694	0.000913	0.03540598	0.86520831	0.21804651	0.00227859	0.00036656	0.00643288	0.00189557
rs9325627	21	T	0.6734	0.0534	0.0008455	0.72412218	0.8236366	0.99951547	0.05563224	0.00514187	0.00575883	0.00682501
rs9345388	6	A	0.4466	-0.0538	0.0004715	0.64009631	0.47831349	0.09270694	0.00415796	0.00274816	0.00211927	0.00048248
rs9363105	6	A	0.4476	-0.0534	0.0005085	0.64421217	0.47807528	0.09140327	0.00437537	0.00295602	0.0022662	0.00051017
rs9363305	6	A	0.6493	-0.053	0.0008775	0.86908055	0.51227801	0.33739436	0.02223593	0.00623727	0.00391415	0.00270156
rs9367114	6	C	0.5663	-0.0658	1.54E-05	0.62311032	0.40913294	0.7550565	0.00129846	0.00012032	8.17E-05	0.00014357
rs9372625	6	G	0.6196	-0.0521	0.0009771	0.40436674	0.68696095	0.00901555	0.00111803	0.0034913	0.0055755	0.00011134
rs9398235	6	G	0.8268	-0.0674	0.0009632	0.45987421	0.78120722	0.80617257	0.03739494	0.00386344	0.00616427	0.00633683
rs9405967	6	C	0.7209	0.0579	0.0007317	0.68580369	0.60380772	0.8234065	0.03464676	0.00431415	0.0038546	0.00506959
rs941650	14	T	0.2752	-0.0602	0.0004681	0.05492441	0.33288653	0.66680736	0.00216469	0.00029743	0.0015219	0.00283169
rs946440	6	G	0.8277	0.0663	0.0009519	0.55160495	0.41609354	0.2800343	0.0128453	0.00449041	0.00349892	0.00246036
rs9471684	6	T	0.6504	0.0648	4.41E-05	0.55504421	0.62179329	0.61432213	0.00316554	0.00028449	0.00031559	0.00031212
rs9471712	6	C	0.599	0.0668	1.20E-05	0.98887485	0.24079273	0.78127336	0.00103664	0.00014589	3.96E-05	0.00011746
rs9507268	13	G	0.4446	0.053	0.000687	0.47597741	0.94239477	0.28184728	0.01653387	0.00295133	0.00540115	0.00184907
rs9511125	13	C	0.4449	0.0527	0.0007482	0.47487997	0.93824425	0.28018731	0.0174161	0.00317733	0.00579959	0.00198528
rs9511127	13	G	0.445	0.0524	0.0007854	0.48149988	0.94318965	0.28442863	0.01847309	0.00335821	0.00608019	0.00210134
rs9511130	13	T	0.4465	0.0519	0.0008752	0.50068791	0.94912289	0.29039164	0.02090534	0.00382674	0.00672286	0.0023579
rs9511137	13	G	0.4403	0.0524	0.0006683	0.49967262	0.96561686	0.32722503	0.01899616	0.00300691	0.0053857	0.00206173
rs9527585	13	A	0.6334	0.0538	0.0005428	0.32254957	0.57983218	0.71402656	0.01451984	0.00168957	0.00285267	0.0034322
rs9545827	13	A	0.7296	-0.0581	0.0007485	0.1424374	0.85228749	0.18040083	0.00484706	0.00108174	0.00533141	0.00133815
rs9545828	13	A	0.8399	-0.0695	0.0008792	0.506619	0.74169983	0.1676348	0.01194903	0.0038825	0.00543548	0.00144768
rs9553509	13	A	0.9407	0.1355	0.0001187	0.40851978	0.78455692	0.3447851	0.00409517	0.00053021	0.00095749	0.00045443
rs9553516	13	C	0.9439	0.1284	0.0004719	0.43757516	0.88688956	0.12091285	0.00607526	0.00195863	0.00367412	0.0006146

rs9561607	13	A	0.6865	0.0552	0.0007043	0.87871899	0.0837715	0.1701716	0.00302691	0.00519093	0.00063354	0.00120202
rs9561619	13	C	0.6866	0.0554	0.0006854	0.90681637	0.08365672	0.16074471	0.00290402	0.0052105	0.00061734	0.00111424
rs9563481	13	C	0.8271	0.074	0.0002113	0.56982154	0.06893375	0.61326939	0.0019812	0.001207	0.00017678	0.00128951
rs9563483	13	T	0.8278	0.0711	0.000364	0.55716761	0.08664715	0.63498863	0.00362161	0.00192734	0.00035842	0.00216632
rs9563495	13	C	0.8209	0.0663	0.0006613	0.11595938	0.2002172	0.48887384	0.00267393	0.00080333	0.00131472	0.00292158
rs9563497	13	T	0.8191	0.0669	0.0005574	0.12991244	0.16234549	0.48433637	0.00216086	0.00076274	0.00093299	0.00248836
rs9563502	13	A	0.7176	0.056	0.0007989	0.02209747	0.24432427	0.69636995	0.00131325	0.00021087	0.00186242	0.00472555
rs9569579	13	G	0.8284	0.0792	7.27E-05	0.72865166	0.13652683	0.62058987	0.0017974	0.00057475	0.00012432	0.00049675
rs9569580	13	C	0.6333	0.0533	0.0006134	0.34820225	0.50172408	0.66435587	0.01433279	0.00201871	0.00279635	0.00358835
rs9569612	13	A	0.8305	0.0737	0.0002475	0.72382271	0.13371	0.61350398	0.0044632	0.0017247	0.00037449	0.00148694
rs9569633	13	C	0.8262	0.0783	9.43E-05	0.59063131	0.08631612	0.6240118	0.00131232	0.00060145	0.00010356	0.00063221
rs9569670	13	C	0.8209	0.0663	0.0006613	0.12239702	0.19021941	0.47333954	0.00261399	0.00084355	0.00125552	0.00283885
rs9569676	13	T	0.7176	0.056	0.0007989	0.02194657	0.24442604	0.69638703	0.00130667	0.00020955	0.00186311	0.00472565
rs9572018	13	A	0.6796	0.0563	0.0006725	0.25815028	0.86435459	0.24519083	0.00885725	0.00167681	0.00491197	0.00160113
rs9572205	13	T	0.6882	0.0546	0.0008699	0.48927549	0.20045777	0.77162803	0.01354533	0.00372927	0.0016835	0.00557557
rs9574199	13	C	0.6919	-0.0565	0.0006431	0.72628739	0.53242211	0.55334474	0.02291977	0.00404909	0.0030746	0.0031817
rs9580831	13	C	0.9673	-0.1455	0.0008974	0.22029595	0.32523413	0.01903312	0.00064588	0.00188378	0.00266742	0.00020458
rs9590023	13	T	0.6446	-0.0547	0.0006141	0.11459351	0.32521835	0.20214669	0.00183965	0.00074325	0.00190102	0.00124065
rs9590679	13	T	0.8132	-0.0673	0.0006553	0.7244793	0.20997539	0.24170581	0.0064709	0.00410789	0.001361	0.00154437
rs9594683	13	A	0.8411	-0.0721	0.0004591	0.63920835	0.12592022	0.90631078	0.00826344	0.0026804	0.00062194	0.00365517
rs9594685	13	G	0.8411	-0.0721	0.0004589	0.64977294	0.15029914	0.87052348	0.00924784	0.00271876	0.00072985	0.00352557
rs9594703	13	A	0.8397	-0.0748	0.0002767	0.61094758	0.14545684	0.80625555	0.0055923	0.0016373	0.00044757	0.00209882
rs9594709	13	C	0.8391	-0.0752	0.0002472	0.54474857	0.17322476	0.3530571	0.00287138	0.00133487	0.00047354	0.00090299
rs9603485	13	A	0.7744	-0.0608	0.0008287	0.77156614	0.95187543	0.99169227	0.06263279	0.00534215	0.00642491	0.00665999
rs961050	13	G	0.3835	-0.0517	0.0008333	0.31698373	0.56321916	0.74159284	0.01960753	0.00244042	0.00406638	0.00518419
rs9612797	22	A	0.8617	0.1028	2.53E-06	0.77302254	0.63422665	0.6615668	0.00046954	2.77E-05	2.30E-05	2.40E-05
rs9624632	22	A	0.8981	0.1086	1.41E-05	0.64351519	0.77383887	0.3186262	0.00104416	0.00011472	0.00013593	6.00E-05
rs963458	6	A	0.8441	0.0719	0.0005189	0.04078185	0.61414623	0.22306813	0.00127728	0.00024893	0.00288448	0.00116492
rs9635884	18	A	0.3437	0.0733	1.13E-05	0.91890373	0.43273657	0.77047219	0.00147172	0.00012996	6.49E-05	0.00011051
rs9639128	7	G	0.8085	-0.0697	0.0003144	0.26634383	0.71413451	0.29626599	0.00513924	0.00086986	0.00211087	0.00095767
rs963964	2	G	0.6899	-0.0589	0.0002993	0.4378142	0.54633666	0.92935838	0.01364913	0.00130252	0.00158917	0.00255552
rs964039	11	C	0.2808	0.0661	0.0004211	0.82754609	0.7347376	0.98626335	0.03493525	0.00312305	0.00280961	0.00364916
rs9648158	7	G	0.8075	-0.0687	0.0003506	0.25028184	0.81153104	0.35843627	0.00675509	0.00090741	0.00260757	0.0012544

rs965561	5	A	0.5544	0.0523	0.0006883	0.11251866	0.68608658	0.68770736	0.00881263	0.00081055	0.00408861	0.00409716
rs9732147	10	A	0.7782	0.0631	0.0004632	0.03318826	0.88667605	0.71801453	0.0032769	0.00018575	0.00361326	0.00299612
rs973431	4	G	0.659	-0.0569	0.0003782	0.56759171	0.63907822	0.98352238	0.02260474	0.0020278	0.00225453	0.00330929
rs975809	10	G	0.4865	0.0568	0.0001384	0.43504989	0.55954379	0.92583989	0.00784003	0.00064532	0.0008105	0.00127655
rs9787810	11	C	0.6877	0.0551	0.0008094	0.80722498	0.73895471	0.27110314	0.0221265	0.00544476	0.00503712	0.00206802
rs9824693	3	C	0.5496	-0.0525	0.000633	0.03107895	0.43247944	0.10404413	0.00049864	0.00023285	0.00251948	0.00069996
rs9833515	3	T	0.9332	0.1166	0.0001375	0.75911447	0.28267925	0.63689109	0.00537198	0.00106126	0.00043359	0.00090577
rs987452	5	C	0.8602	0.0852	0.0001099	0.64386196	0.64639275	0.04304263	0.00094185	0.00074696	0.00074962	6.27E-05
rs9882017	3	G	0.4449	-0.0563	0.0007599	0.3308538	0.23845022	0.54107688	0.00807056	0.00233525	0.00174239	0.00361681
rs9882192	3	A	0.5484	-0.0512	0.0008079	0.03490839	0.43019844	0.12969632	0.00078877	0.00032365	0.00311571	0.00106496
rs9883093	3	T	0.3592	0.0553	0.0005497	0.22537689	0.76734236	0.58542837	0.01199186	0.00123842	0.00369966	0.00290966
rs9883719	3	T	0.425	0.056	0.00027	0.43031612	0.84447637	0.45440532	0.01019975	0.00116886	0.00214012	0.00122761
rs989587	5	T	0.5549	0.0522	0.0006847	0.11734104	0.71426704	0.68776008	0.00932697	0.00083792	0.00421717	0.00407847
rs9898364	17	A	0.912	-0.1011	0.0001927	0.6792477	0.31754107	0.06949247	0.00127357	0.00130121	0.00065483	0.00016365
rs9905316	17	A	0.9121	-0.1008	0.0002063	0.67925899	0.31744216	0.06915535	0.00133808	0.00138351	0.00069638	0.00017345
rs9905797	17	C	0.6722	0.0592	0.0002574	0.14384811	0.56985216	0.42921238	0.00308811	0.00041484	0.00144146	0.00111702
rs9913386	17	T	0.8947	0.0849	0.0006529	0.48332526	0.88666461	0.80014617	0.03216274	0.00285936	0.00489427	0.00447033
rs9915163	17	C	0.9021	0.0932	0.0003045	0.6828899	0.58215217	0.72820497	0.01671024	0.00197091	0.00170846	0.00208745
rs9921866	16	T	0.4756	0.0571	0.0001429	0.58579076	0.46696304	0.20656351	0.00282815	0.00086959	0.00070832	0.00033741
rs9940714	16	A	0.7185	0.0605	0.0003352	0.55120741	0.04239569	0.05363474	0.00027352	0.00177308	0.00017283	0.00021442
rs9945379	18	A	0.4948	0.0536	0.000579	0.19909199	0.27280896	0.70729239	0.00609565	0.0011606	0.00154058	0.00360401
rs9947697	18	A	0.8506	0.0737	0.0005977	0.67788869	0.24890103	0.34196272	0.00844425	0.00357007	0.00145988	0.00194079
rs9949710	18	T	0.6802	-0.0818	8.37E-07	0.39278497	0.57114962	0.82144855	0.00012069	5.23E-06	7.43E-06	1.04E-05
rs9959828	18	G	0.5558	0.0641	2.91E-05	0.5561676	0.8207566	0.18967062	0.00114523	0.00019497	0.00027841	7.24E-05
rs9992816	4	C	0.8976	-0.0831	0.0008275	0.80732325	0.1789322	0.91553722	0.01949568	0.00555234	0.00145369	0.00620128

Supplementary Table 2. Enrichment scores across p-value thresholds and epigenetic features (see separate worksheets). Features are those defined by the Roadmap Epigenomics Consortium (Roadmap Epigenomics Consortium et al., 2015; Nature 518:317-330). "DHS" refers to DNase Hypersensitivity Sites. "Chromatin Marks" is based on chromatin marks assessed across epigenomes and functionally relevant genomic regions; we limit our analyses to regions associated with transcriptional activity rather than repression (see Roadmap Type column in corresponding worksheet). "Histone Marks" indicates that markers map to specific histone marks, noted in the Roadmap Type column. Notation in the Roadmap Type column is taken directly from the Roadmap Epigenomics Consortium conventions. Binomial p-values are provided alongside q-values to account for multiple tests within epigenetic feature. Q-value derivation was based on all tests, but only those with 3 or more markers in the Marker Count column are presented.

GWAS p-value threshold	Roadmap EID	Marker Count	Enrichment Score	Proportion	p-value	q-value	Roadmap Group	Roadmap Epigenome	Anatomy
1.00E-05	E082	7	3.2476	0.0737	0.0015	0.2939	Brain	Fetal Brain Female	BRAIN
1.00E-05	E081	7	3.0431	0.0737	0.0022	0.2939	Brain	Fetal Brain Male	BRAIN
1.00E-05	E007	5	2.6031	0.0526	0.0129	0.5149	ES-deriv	H1 Derived Neuronal Progenitor Cultured Cells	ESC_DERIVED
1.00E-05	E088	7	2.2289	0.0737	0.0136	0.5149	Other	Fetal Lung	LUNG
1.00E-05	E118	4	2.1409	0.0421	0.0399	0.7688	ENCODE2012	HepG2 Hepatocellular Carcinoma Cell Line	LIVER
1.00E-05	E003	3	1.5673	0.0316	0.1258	0.7688	ESC	H1 Cells	ESC
1.00E-05	E093	3	1.4691	0.0316	0.1486	0.7688	Thymus	Fetal Thymus	THYMUS
1.00E-05	E092	3	1.4570	0.0316	0.1517	0.7688	Digestive	Fetal Stomach	GI_STOMACH

1.00E-04	E086	33	1.3221	0.0316	0.0468	0.7688	Other	Fetal Kidney	KIDNEY
1.00E-05	E086	3	1.3196	0.0316	0.1935	0.7688	Other	Fetal Kidney	KIDNEY
1.00E-04	E082	31	1.3100	0.0297	0.0567	0.7688	Brain	Fetal Brain Female	BRAIN
1.00E-04	E081	33	1.3067	0.0316	0.0533	0.7688	Brain	Fetal Brain Male	BRAIN
1.00E-05	E083	4	1.3005	0.0421	0.1950	0.7688	Heart	Fetal Heart	HEART
1.00E-04	E088	44	1.2761	0.0422	0.0457	0.7688	Other	Fetal Lung	LUNG
1.00E-04	E100	31	1.2618	0.0297	0.0826	0.7688	Muscle	Psoas Muscle	MUSCLE
1.00E-05	E004	3	1.2489	0.0316	0.2201	0.7688	ES-deriv	H1 BMP4 Derived Mesendoderm Cultured Cells	ESC_DERIVED
1.00E-04	E029	18	1.2394	0.0173	0.1469	0.7688	HSC & B-cell	Primary monocytes fromÂ peripheralÂ blood	BLOOD
1.00E-04	E021	34	1.2133	0.0326	0.1099	0.7688	iPSC	iPS DF 6.9 Cells	IPSC
1.00E-04	E120	31	1.1935	0.0297	0.1371	0.7688	ENCODE2012	HSMM Skeletal Muscle Myoblasts Cells	MUSCLE

1.00E-05	E055	3	1.1887	0.0316	0.2461	0.7688	Epithelial	Foreskin Fibroblast Primary Cells skin01	SKIN
0.001	E124	206	1.1773	0.0221	0.0093	0.4954	ENCODE2012	Monocytes-CD14+ RO01746 Primary Cells	BLOOD
1.00E-04	E089	34	1.1674	0.0326	0.1561	0.7688	Muscle	Fetal Muscle Trunk	MUSCLE
1.00E-04	E007	24	1.1381	0.0230	0.2217	0.7688	ES-deriv	H1 Derived Neuronal Progenitor Cultured Cells	ESC_DERIVED
1.00E-04	E017	23	1.1376	0.0221	0.2255	0.7688	IMR90	IMR90 fetal lung fibroblasts Cell Line	LUNG
1.00E-04	E125	28	1.1308	0.0268	0.2193	0.7688	ENCODE2012	NH-A Astrocytes Primary Cells	BRAIN
1.00E-04	E128	27	1.1212	0.0259	0.2352	0.7688	ENCODE2012	NHLF Lung Fibroblast Primary Cells	LUNG

1.00E-04	E005	18	1.1110	0.0173	0.2734	0.7688	ES-deriv	H1 BMP4 Derived Trophoblast Cultured Cells	ESC_DERIVED
1.00E-04	E097	24	1.0935	0.0230	0.2829	0.7688	Other	Ovary	OVARY
0.001	E082	231	1.0928	0.0248	0.0824	0.7688	Brain	Fetal Brain Female	BRAIN
0.001	E046	168	1.0881	0.0180	0.1270	0.7688	HSC & B-cell	Primary Natural Killer cells fromÂ peripheralÂ blood	BLOOD
1.00E-04	E055	30	1.0827	0.0288	0.2881	0.7688	Epithelial	Foreskin Fibroblast Primary Cells skin01	SKIN
1.00E-04	E121	34	1.0744	0.0326	0.2959	0.7688	ENCODE2012	HSMM cell derived Skeletal Muscle Myotubes Cells	MUSCLE
0.001	E051	162	1.0652	0.0174	0.1962	0.7688	HSC & B-cell	Primary hematopoietic stem cells G-CSF-mobilized Male	BLOOD

0.01	E033	1540	1.0617	0.0162	0.0091	0.4954	Blood & T-cell	Primary T cells from cord blood	BLOOD
1.00E-04	E056	28	1.0583	0.0268	0.3343	0.8047	Epithelial	Foreskin Fibroblast Primary Cells skin02	SKIN
0.01	E032	2050	1.0545	0.0216	0.0077	0.4954	HSC & B-cell	Primary B cells from peripheral blood	BLOOD
0.001	E032	201	1.0542	0.0216	0.2128	0.7688	HSC & B-cell	Primary B cells from peripheral blood	BLOOD
0.01	E097	2092	1.0465	0.0220	0.0178	0.5897	Other	Ovary	OVARY
1.00E-04	E090	34	1.0424	0.0326	0.3596	0.8286	Muscle	Fetal Muscle Leg	MUSCLE_LEG
0.01	E007	1997	1.0398	0.0210	0.0388	0.7688	ES-deriv	H1 Derived Neuronal Progenitor Cultured Cells	ESC_DERIVED
1.00E-04	E091	31	1.0370	0.0297	0.3727	0.8442	Other	Placenta	PLACENTA
1.00E-04	E083	35	1.0365	0.0336	0.3716	0.8442	Heart	Fetal Heart	HEART

0.01	E051	1606	1.0357	0.0169	0.0767	0.7688	HSC & B-cell	Primary hematopoietic stem cells G-CSF-mobilized Male	BLOOD
0.001	E081	233	1.0328	0.0250	0.2945	0.7688	Brain	Fetal Brain Male	BRAIN
0.01	E034	1887	1.0321	0.0199	0.0815	0.7688	Blood & T-cell	Primary T cells fromÂ peripheralÂ blood	BLOOD
1.00E-04	E032	22	1.0307	0.0211	0.3877	0.8562	HSC & B-cell	Primary B cells from peripheral blood	BLOOD
0.01	E046	1619	1.0285	0.0170	0.1250	0.7688	HSC & B-cell	Primary Natural Killer cells fromÂ peripheralÂ blood	BLOOD
0.01	E086	2336	1.0276	0.0246	0.0899	0.7688	Other	Fetal Kidney	KIDNEY
0.01	E114	1693	1.0224	0.0178	0.1751	0.7688	ENCODE2012	A549 EtOH 0.02pct Lung Carcinoma Cell Line	LUNG
1.00E-04	E008	23	1.0218	0.0221	0.4039	0.8675	ESC	H9 Cells	ESC

1.00E-04	E124	20	1.0210	0.0192	0.4040	0.8675	ENCODE2012	Monocytes-CD14+ RO01746 Primary Cells	BLOOD
0.01	E089	2708	1.0209	0.0285	0.1358	0.7688	Muscle	Fetal Muscle Trunk	MUSCLE
0.01	E082	2197	1.0194	0.0231	0.1784	0.7688	Brain	Fetal Brain Female	BRAIN
1.00E-04	E006	27	1.0182	0.0259	0.4116	0.8675	ES-deriv	H1 Derived Mesenchymal Stem Cells	ESC_DERIVED
0.01	E119	2151	1.0178	0.0226	0.2003	0.7688	ENCODE2012	HMEC Mammary Epithelial Primary Cells	BREAST
0.01	E081	2338	1.0165	0.0246	0.2085	0.7688	Brain	Fetal Brain Male	BRAIN
0.01	E100	2274	1.0163	0.0239	0.2142	0.7688	Muscle	Psoas Muscle	MUSCLE
0.001	E100	223	1.0161	0.0239	0.3875	0.8562	Muscle	Psoas Muscle	MUSCLE
0.01	E092	2091	1.0156	0.0220	0.2328	0.7688	Digestive	Fetal Stomach	GI_STOMACH
0.01	E093	2070	1.0138	0.0218	0.2604	0.7688	Thymus	Fetal Thymus	THYMUS
0.001	E033	144	1.0121	0.0155	0.4203	0.8680	Blood & T-cell	Primary T cells from cord blood	BLOOD

0.001	E050	189	1.0119	0.0203	0.4158	0.8675	HSC & B-cell	Primary hematopoietic stem cells G-CSF-mobilized Female	BLOOD
0.01	E117	2213	1.0115	0.0233	0.2885	0.7688	ENCODE2012	HeLa-S3 Cervical Carcinoma Cell Line	CERVIX
0.001	E091	270	1.0111	0.0290	0.4111	0.8675	Other	Placenta	PLACENTA
1.00E-05	E090	3	1.0098	0.0316	0.3461	0.8117	Muscle	Fetal Muscle Leg	MUSCLE_LEG
0.001	E029	131	1.0098	0.0141	0.4323	0.8745	HSC & B-cell	Primary monocytes fromÂ peripheralÂ blood	BLOOD
0.01	E028	2238	1.0081	0.0236	0.3445	0.8117	Epithelial	Breast variant Human Mammary Epithelial Cells (vHMEC)	BREAST
0.01	E088	3165	1.0079	0.0333	0.3231	0.8003	Other	Fetal Lung	LUNG
0.01	E003	1929	1.0078	0.0203	0.3591	0.8286	ESC	H1 Cells	ESC

0.01	E017	1853	1.0063	0.0195	0.3867	0.8562	IMR90	IMR90 fetal lung fibroblasts Cell Line	LUNG
0.001	E085	122	1.0050	0.0131	0.4539	0.8910	Digestive	Fetal Intestine Small	GI_INTESTINE
0.01	E008	2059	1.0043	0.0217	0.4157	0.8675	ESC	H9 Cells	ESC
0.01	E123	2623	1.0043	0.0276	0.4069	0.8675	ENCODE2012	K562 Leukemia Cells	BLOOD
0.01	E094	1033	1.0032	0.0109	0.4510	0.8910	Digestive	Gastric	GI_STOMACH
0.01	E090	2980	1.0032	0.0314	0.4259	0.8681	Muscle	Fetal Muscle Leg	MUSCLE_LEG
0.01	E083	3082	1.0021	0.0324	0.4479	0.8910	Heart	Fetal Heart	HEART
0.01	E050	1906	1.0009	0.0201	0.4780	0.9068	HSC & B-cell	Primary hematopoietic stem cells G-CSF-mobilized Female	BLOOD
0.01	E109	1936	1.0008	0.0204	0.4791	0.9068	Digestive	Small Intestine	GI_INTESTINE
0.01	E022	2481	0.9999	0.0261	0.4973	0.9216	iPSC	iPS DF 19.11 Cells	IPSC
0.01	E006	2413	0.9992	0.0254	0.5112	0.9275	ES-deriv	H1 Derived Mesenchymal Stem Cells	ESC_DERIVED

1.00E-04	E051	17	0.9985	0.0163	0.4384	0.8801	HSC & B-cell	Primary hematopoietic stem cells G-CSF-mobilized Male	BLOOD
0.01	E098	1666	0.9973	0.0175	0.5376	0.9286	Other	Pancreas	PANCREAS
0.01	E126	2484	0.9971	0.0261	0.5540	0.9337	ENCODE2012	NHDF-Ad Adult Dermal Fibroblast Primary Cells	SKIN
0.01	E056	2402	0.9968	0.0253	0.5574	0.9337	Epithelial	Foreskin Fibroblast Primary Cells skin02	SKIN
0.01	E122	1653	0.9957	0.0174	0.5645	0.9337	ENCODE2012	HUVEC Umbilical Vein Endothelial Primary Cells	VASCULAR
0.01	E124	1776	0.9955	0.0187	0.5697	0.9337	ENCODE2012	Monocytes-CD14+ RO01746 Primary Cells	BLOOD

0.01	E118	1859	0.9951	0.0196	0.5789	0.9337	ENCODE2012	HepG2 Hepatocellular Carcinoma Cell Line	LIVER
0.01	E055	2508	0.9938	0.0264	0.6184	0.9635	Epithelial	Foreskin Fibroblast Primary Cells skin01	SKIN
0.001	E088	306	0.9935	0.0328	0.5313	0.9286	Other	Fetal Lung	LUNG
0.01	E005	1465	0.9928	0.0154	0.6033	0.9609	ES-deriv	H1 BMP4 Derived Trophoblast Cultured Cells	ESC_DERIVED
0.001	E034	178	0.9926	0.0191	0.5199	0.9286	Blood & T-cell	Primary T cells fromÂ peripheralÂ blood	BLOOD
0.01	E120	2347	0.9921	0.0247	0.6463	0.9635	ENCODE2012	HSMM Skeletal Muscle Myoblasts Cells	MUSCLE
0.001	E017	179	0.9911	0.0192	0.5285	0.9286	IMR90	IMR90 fetal lung fibroblasts Cell Line	LUNG
0.001	E116	211	0.9902	0.0226	0.5396	0.9286	ENCODE2012	GM12878 Lymphoblastoid Cells	BLOOD

0.01	E021	2525	0.9894	0.0266	0.7030	0.9996	iPSC	iPS DF 6.9 Cells	IPSC
0.001	E122	161	0.9887	0.0173	0.5371	0.9286	ENCODE2012	HUVEC Umbilical Vein Endothelial Primary Cells	VASCULAR
0.01	E059	2668	0.9872	0.0281	0.7469	0.9996	Epithelial	Foreskin Melanocyte Primary Cells skin01	SKIN
0.001	E086	220	0.9867	0.0236	0.5621	0.9337	Other	Fetal Kidney	KIDNEY
0.01	E091	2676	0.9829	0.0282	0.8144	0.9996	Other	Placenta	PLACENTA
0.01	E116	2134	0.9822	0.0225	0.7956	0.9996	ENCODE2012	GM12878 Lymphoblastoid Cells	BLOOD
1.00E-04	E098	18	0.9814	0.0173	0.4700	0.9053	Other	Pancreas	PANCREAS
0.001	E021	245	0.9787	0.0263	0.6178	0.9635	iPSC	iPS DF 6.9 Cells	IPSC
0.01	E121	2820	0.9785	0.0297	0.8780	0.9996	ENCODE2012	HSMM cell derived Skeletal Muscle Myotubes Cells	MUSCLE
0.01	E057	2793	0.9783	0.0294	0.8789	0.9996	Epithelial	Foreskin Keratinocyte Primary Cells skin02	SKIN

1.00E-04	E059	29	0.9773	0.0278	0.5013	0.9225	Epithelial	Foreskin Melanocyte Primary Cells skin01	SKIN
0.01	E080	1914	0.9764	0.0201	0.8521	0.9996	Other	Fetal Adrenal Gland	ADRENAL
1.00E-04	E080	21	0.9757	0.0201	0.4881	0.9109	Other	Fetal Adrenal Gland	ADRENAL
1.00E-04	E118	20	0.9750	0.0192	0.4868	0.9109	ENCODE2012	HepG2 Hepatocellular Carcinoma Cell Line	LIVER
0.001	E097	191	0.9742	0.0205	0.6252	0.9635	Other	Ovary	OVARY
0.01	E004	2338	0.9734	0.0246	0.9057	0.9996	ES-deriv	H1 BMP4 Derived Mesendoderm Cultured Cells	ESC_DERIVED
0.01	E125	2191	0.9716	0.0231	0.9127	0.9996	ENCODE2012	NH-A Astrocytes Primary Cells	BRAIN
0.01	E084	1670	0.9710	0.0176	0.8854	0.9996	Digestive	Fetal Intestine Large	GI_INTESTINE

0.01	E029	1284	0.9708	0.0135	0.8548	0.9996	HSC & B-cell	Primary monocytes fromÂ peripheralÂ blood	BLOOD
0.001	E118	177	0.9660	0.0190	0.6621	0.9801	ENCODE2012	HepG2 Hepatocellular Carcinoma Cell Line	LIVER
0.01	E127	1961	0.9651	0.0206	0.9433	0.9996	ENCODE2012	NHEK-Epidermal Keratinocyte Primary Cells	SKIN
0.01	E085	1190	0.9615	0.0125	0.9121	0.9996	Digestive	Fetal Intestine Small	GI_INTESTINE
0.001	E128	206	0.9577	0.0221	0.7213	0.9996	ENCODE2012	NHLF Lung Fibroblast Primary Cells	LUNG
0.001	E080	184	0.9570	0.0197	0.7117	0.9996	Other	Fetal Adrenal Gland	ADRENAL
0.01	E128	2092	0.9539	0.0220	0.9857	0.9996	ENCODE2012	NHLF Lung Fibroblast Primary Cells	LUNG
1.00E-04	E003	20	0.9517	0.0192	0.5313	0.9286	ESC	H1 Cells	ESC
0.001	E022	230	0.9450	0.0247	0.7976	0.9996	iPSC	iPS DF 19.11 Cells	IPSC

1.00E-04	E028	23	0.9436	0.0221	0.5586	0.9337	Epithelial	Breast variant Human Mammary Epithelial Cells (vHMEC)	BREAST
0.001	E114	152	0.9359	0.0163	0.7821	0.9996	ENCODE2012	A549 EtOH 0.02pct Lung Carcinoma Cell Line	LUNG
0.001	E120	217	0.9352	0.0233	0.8328	0.9996	ENCODE2012	HSMM Skeletal Muscle Myoblasts Cells	MUSCLE
1.00E-04	E122	17	0.9326	0.0163	0.5536	0.9337	ENCODE2012	HUVEC Umbilical Vein Endothelial Primary Cells	VASCULAR
0.001	E117	200	0.9320	0.0215	0.8346	0.9996	ENCODE2012	HeLa-S3 Cervical Carcinoma Cell Line	CERVIX
1.00E-04	E092	21	0.9290	0.0201	0.5803	0.9337	Digestive	Fetal Stomach	GI_STOMACH
0.001	E125	205	0.9268	0.0220	0.8574	0.9996	ENCODE2012	NH-A Astrocytes Primary Cells	BRAIN

0.001	E005	132	0.9120	0.0142	0.8475	0.9996	ES-deriv	H1 BMP4 Derived Trophoblast Cultured Cells	ESC_DERIVED
0.001	E006	216	0.9119	0.0232	0.9114	0.9996	ES-deriv	H1 Derived Mesenchymal Stem Cells	ESC_DERIVED
0.001	E055	225	0.9090	0.0241	0.9236	0.9996	Epithelial	Foreskin Fibroblast Primary Cells skin01	SKIN
1.00E-04	E050	19	0.9087	0.0182	0.6098	0.9619	HSC & B-cell	Primary hematopoietic stem cells G-CSF-mobilized Female	BLOOD
0.001	E127	181	0.9082	0.0194	0.9000	0.9996	ENCODE2012	NHEK-Epidermal Keratinocyte Primary Cells	SKIN
0.001	E090	264	0.9061	0.0283	0.9468	0.9996	Muscle	Fetal Muscle Leg	MUSCLE_LEG
0.001	E083	273	0.9050	0.0293	0.9520	0.9996	Heart	Fetal Heart	HEART

0.001	E126	221	0.9044	0.0237	0.9325	0.9996	ENCODE2012	NHDF-Ad Adult Dermal Fibroblast Primary Cells	SKIN
0.001	E093	181	0.9038	0.0194	0.9116	0.9996	Thymus	Fetal Thymus	THYMUS
0.001	E098	147	0.8972	0.0158	0.9027	0.9996	Other	Pancreas	PANCREAS
1.00E-04	E127	20	0.8965	0.0192	0.6397	0.9635	ENCODE2012	NHEK-Epidermal Keratinocyte Primary Cells	SKIN
0.001	E008	179	0.8902	0.0192	0.9400	0.9996	ESC	H9 Cells	ESC
0.001	E028	193	0.8864	0.0207	0.9538	0.9996	Epithelial	Breast variant Human Mammary Epithelial Cells (vHMEC)	BREAST
0.001	E007	166	0.8812	0.0178	0.9485	0.9996	ES-deriv	H1 Derived Neuronal Progenitor Cultured Cells	ESC_DERIVED
0.001	E094	89	0.8812	0.0096	0.8762	0.9996	Digestive	Gastric	GI_STOMACH

1.00E-04	E114	16	0.8800	0.0153	0.6424	0.9635	ENCODE2012	A549 EtOH 0.02pct Lung Carcinoma Cell Line	LUNG
0.001	E059	232	0.8752	0.0249	0.9804	0.9996	Epithelial	Foreskin Melanocyte Primary Cells skin01	SKIN
0.001	E089	227	0.8725	0.0244	0.9816	0.9996	Muscle	Fetal Muscle Trunk	MUSCLE
1.00E-04	E004	23	0.8721	0.0221	0.7072	0.9996	ES-deriv	H1 BMP4 Derived Mesendoderm Cultured Cells	ESC_DERIVED
0.001	E121	245	0.8667	0.0263	0.9889	0.9996	ENCODE2012	HSMM cell derived Skeletal Muscle Myotubes Cells	MUSCLE
0.001	E057	241	0.8606	0.0259	0.9914	0.9996	Epithelial	Foreskin Keratinocyte Primary Cells skin02	SKIN
0.001	E056	203	0.8589	0.0218	0.9863	0.9996	Epithelial	Foreskin Fibroblast Primary Cells skin02	SKIN

0.001	E004	201	0.8532	0.0216	0.9891	0.9996	ES-deriv	H1 BMP4 Derived Mesendoderm Cultured Cells	ESC_DERIVED
0.001	E109	158	0.8328	0.0170	0.9905	0.9996	Digestive	Small Intestine	GI_INTESTINE
0.001	E084	140	0.8300	0.0150	0.9875	0.9996	Digestive	Fetal Intestine Large	GI_INTESTINE
0.001	E092	164	0.8121	0.0176	0.9969	0.9996	Digestive	Fetal Stomach	GI_STOMACH
0.001	E003	152	0.8097	0.0163	0.9962	0.9996	ESC	H1 Cells	ESC
1.00E-04	E085	11	0.8095	0.0105	0.7054	0.9996	Digestive	Fetal Intestine Small	GI_INTESTINE
0.001	E123	207	0.8081	0.0222	0.9993	0.9996	ENCODE2012	K562 Leukemia Cells	BLOOD
0.001	E119	167	0.8057	0.0179	0.9980	0.9996	ENCODE2012	HMEC Mammary Epithelial Primary Cells	BREAST
1.00E-04	E126	22	0.8043	0.0211	0.8259	0.9996	ENCODE2012	NHDF-Ad Adult Dermal Fibroblast Primary Cells	SKIN
1.00E-04	E022	21	0.7708	0.0201	0.8697	0.9996	iPSC	iPS DF 19.11 Cells	IPSC

1.00E-04	E123	22	0.7672	0.0211	0.8817	0.9996	ENCODE2012	K562 Leukemia Cells	BLOOD
1.00E-04	E046	13	0.7521	0.0125	0.8194	0.9996	HSC & B-cell	Primary Natural Killer cells fromÂ peripheralÂ blood	BLOOD
1.00E-04	E057	23	0.7337	0.0221	0.9275	0.9996	Epithelial	Foreskin Keratinocyte Primary Cells skin02	SKIN
1.00E-04	E094	8	0.7076	0.0077	0.7955	0.9996	Digestive	Gastric	GI_STOMACH
1.00E-04	E119	16	0.6895	0.0153	0.9261	0.9996	ENCODE2012	HMEC Mammary Epithelial Primary Cells	BREAST
1.00E-04	E084	13	0.6884	0.0125	0.8992	0.9996	Digestive	Fetal Intestine Large	GI_INTESTINE
1.00E-04	E109	14	0.6592	0.0134	0.9368	0.9996	Digestive	Small Intestine	GI_INTESTINE
1.00E-04	E034	13	0.6476	0.0125	0.9377	0.9996	Blood & T-cell	Primary T cells fromÂ peripheralÂ blood	BLOOD
1.00E-04	E033	10	0.6279	0.0096	0.9217	0.9996	Blood & T-cell	Primary T cells from cord blood	BLOOD

1.00E-04	E093	14	0.6245	0.0134	0.9616	0.9996	Thymus	Fetal Thymus	THYMUS
1.00E-04	E117	13	0.5412	0.0125	0.9901	0.9996	ENCODE2012	HeLa-S3 Cervical Carcinoma Cell Line	CERVIX
1.00E-04	E116	9	0.3773	0.0086	0.9996	0.9996	ENCODE2012	GM12878 Lymphoblastoid Cells	BLOOD